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ECONOMIC AFFAIRS

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PEOPLE'S REPUBLIC OF CHINA

PROSPECTS GOOD FOR NORTHEAST ENERGY CONSTRUCTION

Beijing LIAOWANG [OUTLOOK] in Chinese No 8, 20 Feb 84 p 18

[Interview with Shen Yue, Director of Office of Energy and Transportation Planning for the Northeast, by correspondent Gu Tiefeng: "Future Bodes Well for Northeast Energy Construction"; date and place of interview not given]

[Text] At present, an energy shortage is the main impediment to the further development of the industrial base in the Northeast. This situation has generated much discussion. We recently interviewed Comrade Shen Yue, Director of the Office of Energy and Transportation Planning for the Northeast, which is part of the State Council, and talked to him about the energy future of the region. The Northeast is China's key industrial base. It was built with the support of the nation and has in turn aided the construction of China. During an inspection tour of Liaoning in 1981, responsible cadres from the central authorities said, "The Northeast has four overwhelming advantages: abundant natural resources, considerable fixed assets, an advanced communications netowrk, and powerful technological expertise." "The Northeast has the five bases for China's socialist construction: iron and steel, energy, machinery, lumber and food." The economic importance of the region is thus obvious. Comrade Shen Yue said, "The Northeast industrial base has an integrated internal economic system; electricity, coal, railroads, and oil all form part of a unified system or are closely co-ordinated with one another. However, owing to certain structural disharmonies, we still do not have a regional balance or region-wide planning. Energy production still lags behind the needs of national economic development. This deficiency has put a curb on further expanding the productivity of the entire nation. Now that the Party Central Committee and the State Council have made the energy problem in the Northeast an issue of national strategic importance to be dealt with through comprehensive planning, the stage is set for that region to play an even more important role.

"The key to solving the energy shortage in the Northeast lies in defining the goals, distribution and priorities of coal mine development." For the past half year, comrades from the Planning Office have been prospecting and investigating in the field. They have collected numerous facts suggesting that with its rich and varied coal resources, the Northeast is equipped to develop large-scale coal mines. In 1982, proven reserves region-wide amounted to 63.4 billion tons, and estimated reserves 91.1 billion tons. Of the former, production and construction would take up only 15.9 billion tons. Assuming an annual coal output of 300 million tons, production can continue for the next 200 years.

While coal mine construction in the Northeast requires more investment than in Shanxi, transporting coal from outside Shanhaiguan is very expensive. According to statistics for the past 25 years, altogether 178 million tons of coal were imported from outside Shanhaiguan by the Northeast at a cost of 2.5 billion yuan, enough to build a coal mine in the region with an annual production capacity of 20 million tons. Hence it is more economical to develop local coal resources. In addition to its numerous coal mines, moreover, the region has the necessary expertise and managerial base.

Comrade Shen Yue said, "To meet the more pressing short-term need, we have been concentrating on old mines for the past 10 years. Our priorities are to renovate and expand existing mine pits so that relatively rapid results and greater economic benefits may be obtained with the least investment. Regionally, there are ten mining areas with fairly good potential for increased output, such as Hegang and Shuangyashan in Heilongjiang, Shenyang and Tiefa in Liaoning, Zalainuoer in Nei Monggol, and Hunchun in Jilin, etc. We pin our hopes for solving the region's energy shortage on Nei Monggol's three major open-pit coal mines, including Yuanbaoshan and Huolinhe. At the same time, we should support local mines."

Referring to the need for integrated planning for and simultaneous development of coal, electricity, roads and harbors, Shen Yue said, "We should rely mainly on electricity generated by coal, but vigorously promote hydroelectric power and actively develop nuclear power as well. Our aim is to link up the power network of the Northeast with that of the North as soon as possible through the construction of a basic 500 kV transmission network. Power plants that burn coal should be located as close to harbors and coal mines as possible. During the Seventh Five-Year Plan period and the following 10 years, there will be a substantial increase in coal output, both local and that imported from outside Shanhaiguan, which would put further pressure on the transportation facilities. Therefore, we must speed up the modification and construction of railroads, harbors, and highways. In Shen Yue's opinion, hastening energy construction in the Northeast depends on three other things. First, we must insist that development and economizing be accorded equal importance, but make the latter our priority in the short run. Second, we must strengthen our geological prospecting work, make full use of existing prospecting contingents in the region and improve our prospecting methods. Third, we must take advantage of the strong machinery industry in the Northeast and mobilize various enterprises to launch a co-ordinated onslaught to produce large-scale electrical and mechanical facilities and mining equipment.

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OVERVIEW OF NORTHWEST ELECTRIC POWER CONSTRUCTION

Beijing LIAOWANG [OUTLOOK] in Chinese No 8, 20 Feb84 pp 16-17

[Article by Xiao Genxing]

[Text] In drawing up its development plan recently, the Northwest Electricity Management Bureau hit upon a strategic idea: convert local coal and water resources into electricity within the region and export electricity to other parts of the nation, thereby hastening the development of the region as a base for electricity. The Northwest will thus prosper while assisting the nation as well. It also suggested the use of small networks for electricity transmission so that as early as 1986, 550 kV transmission of 2.2 billion kilowatt-hours could be delivered to ease the shortage in northern Sichuan, western Henan, and southern Shanxi.

After several decades' development, China basically has established a number of major power transmission networks. However, owing to a variety of reasons, we still think in terms of a local balance and fail to take into account the national perspective. Since the idea of a national network occurs to few people, the several key networks have become autonomous systems. Inter-network coordination is non-existent and inter-network regulation is even more difficult. While the Northwest network yields a surplus, its neighbors in Central China, North China and the Southwest suffer from a chronic shortage.

The value of the Bureau's proposals lies in their breaking free from the confines of regionalism and extending the concept of a network to the entire nation. They have done valuable exploratory work into the mechanics of bringing about a comprehensive balance among the electric network, the energy network, and the road network.

The Northwest electric power network currently has an annual surplus of 2 to 3 billion kwh, its excess generating capacity amounting to 1 million kilowatts during the wet season. The development plan envisages that with the completion of the small network in 1986, the construction of extra high-tension power lines can be speeded up so that via these aerial 'bridges' electricity could flow continuously to North China, Central China, and the Southwest, and such key economic areas as Beijing, Wuhan, and Chongqing. Our second goal is to export 3 million kilowatts by 1990. This will be followed by further goals, the ultimate objective being a generating capacity of 30 billion kilowatts by the end

of the cnetrury so that it could supply the three electricity-deficient networks with 10 million kilowatts, or 45 billion kwh. Electricity can also be transmitted through relaying: the Northwest network can send electricity to the Northeast through the North China network, and to East China through the Central China network.

At the moment, over 50 percent of the electricity shortages in the North China, Central China, and the Southwest networks occur during periods of peak demand. To impose some arbitrary limits on the consumption of electricity will adversely affect the national economy and people's living. An effective approach to this problem is to develop the abundant hydroelectric power resources in the Northwest. Hydroelectric generators may be started and stopped quickly and are safe and economical to operate. Once these resources are exploited, they can regulate the supply of electricity throughout the four networks with tremendous economic benefits. If the Northwest and North China networks are linked up, thermal generating units in North China can operate extra hours and can produce an additional 3 billion kwh a year. Owing to the regulating effects of hydroelectric power, thermal generating units in the Northwest will also become more productive, generating an extra 1.6 billion kwh each year. It is estimated that the additional power generating capacity in the two networks would mean an increase of 10 billion yuan in industrial putput. Moreover, the link-up between the Northwest and Central China networks will enable hydroelectric power stations on the Chang Jiang and Huang He river systems to benefit from regulation so that stations with excess water can come to the aid of those less well endowed. For example, after a flood season, the Liujiaxia hydroelectric power station and others can supplement the water at the Gezhouba station so that the latter can generate an additional 550,000 kilowatts.

The most vexing problem now facing netowrks in Central China, the Southwest, and other places is the fact that transportation facilities for coal are being stretched to the breaking point. The Northwest may produce a great deal of coal but getting it out is difficult. Shanxi coal alone is clogging the Longhai Highway. The suggestions by the Northwest Electricity Management Bureau clearly should prompt people to think along new lines. What cannot be sent on land should be sent by "air." The delivery of electricity is tantamount to the delivery of coal. Electric power plants now being planned for the Northwest will all be built near coal mines so that coal can be converted into electricity right where it is mined. Not only will this approach stimulate coal development in the Northwest, it will also ease the pressure on roads and networks, creating a three-dimensional transportation system. If we manage to send to Sichuan and Central China 10 billion kwh each, we would in effect be delivering 12 million tons of coal to these two coal-poor regions afflicted with the worst traffic bottlenecks. There will then be more capacity in the transportation system to meet other national economic needs. Apart from boosting the regional economy, the establishment of an electric power base in the Northwest would gradually attract energy-intensive industries, such as ironwork and metal processing, electric steel, electrolytic aluminum, and calcium carbide, to move to the Northwest from electricity-poor areas. As a result, the industrial distribution of China will become more rational.

Does the Northwest have the prerequisites to become an electric power base in a short time?

As we all know, the Northwest abounds with coal resources as well as hydroelectric resources, much of them still unexploited. Only 4 percent and 7 percent of its coal and water resources, respectively, have been developed.

There are other favorable circumstances. The water resources in the region are concentrated in the Huang He, Han He, and Bailong Jiang. The four provinces drained by the Huang He alone account for about 68 percent of the total developable water resources in the region. As one of the few places in China which are rich in water and electricity resources, the Huang He offers good natural and man-made conditions. Judged by such technical economic indicators as flood losses and investment returns, it is also an ideal location. The current plan calls for the construction of 15 cascade power stations between Longyangxia in Qinghai Province and Qingtongxia in Ningxia Province, with an installed capacity of 13 million kW. According to rough calculations, it costs about one-third less to build a power station in this section of the river than what it took to build the existing stations in the nation or what it now costs to build the 18 new stations, including Xinqanjiang, Danjiang, and Gezhouba. There are other advantages to turning this part of the Huang He into an electric power base. It will harness the river, promote soil conservation and help prevent flood and ice downstream. It will also benefit industry, agriculture, lumber and husbandry, and ensure a water supply for villages and towns in the lower reaches of the river. Construction can start shortly on hydroelectric facilities at Lijiaxia, Laxiwa and Daxia, etc.

The Northwest is also well suited to become a coal and electric base. The region produces coal of a high quality, its coal seams are thick, and the reserves are near the surface so that they can be recovered relatively easily. It takes less to mine 1 ton of coal in the Northwest than the national average. If only we modify the operating mines technologically and put into service new mines, we can produce an additional 12 million tons of coal within a short time, enough to meet the needs of 4 million kW - generating machinery. Forthermore, the mining areas are rich in ground water and surface water. A basic rail network is already in place. Environmental protection and the location of electric power plants are lesser problems in the Northwest with its vast size and sparse population. All these conditions create a favorable environment for the construction of pit-mouth power plants. After years of hard work by the electricity departments in the Northwest, construction can start soon on a number of large-scale coal-burning electric power plants, including Jingyuan and Daba.

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AGGREGATE ECONOMIC DATA

BRIEFS

INTRODUCTION OF TECHNOLOGY--In the 10 years from 1973 through 1982 there have been 610 contracts signed between China and other countries for the introduction of technology (not including projects cooperatively funded and run and cooperative projects for offshore oil exploration, development and production). Among them, 281 have been for "complete sets of equipment," 157 for licensing of trade, 15 for consultation and advice, 37 for technological service, 31 for cooperative production and 81 for other purposes. According to published statistics of industrial departments: 227 have been for mechanization and electronics, 106 for energy resources, 78 for chemical industry, 75 for metallurgy, 62 for light indusry and 62 for other areas. Arranged according to the proportion (percentage) of the value of the contracts with importing countries and areas: with Japan 49.7, West Germahy 22.0, the United States 6.9, England 3.7 and France 7.0, with Western and Northern Europe 8.2, Eastern European countries 2.4 and other countries and areas 0.1. [Text] [Hebei, JINGJIXUE XHOUBAO [ECONOMIC WEEKLY] in Chinese 27 Feb 84 p 1] 12586

CSO: 4006/446

REFORM OF WAGE SYSTEM TO PROMOTE PRODUCTION EMPHASIZED

Beijing JINGJI YU GUANLI YANJIU [ECONOMIC AND MANAGEMENT RESEARCH] in Chinese No 1, 30 Jan 84 pp 57-60

[Article by Zhong Lihui [6988 4539 8748] and Liu Chuanji [0491 0278 3444]: "Reform of Wage System to Promote Production Construction"]

[Text] The wage system includes the wage level system and the various forms of wages. Currently, many problems exist in the wage system and it is in urgent need of reorganization and reform. Otherwise, it will affect the production of our country and the achievement of our great goals. The elements and direction of reform may be summarized in the following three areas.

I. Integration of the Work of the Staff and Workers with Production Characteristics and Establishment of Wage Level System That Meets Our Country's Conditions.

To reform the wage system, it is first necessary to reform the wage level system. This has been the central element during all previous wage reforms in our country.

The wage level system classifies labor into grades and establishes wage standards for these grades according to the complexity, strenuousness and responsibility of the labor.

The wage level system is the basic wage system. It establishes the wage relationship among industries, enterprises, jobs and regions and it establishes the wage standards for a definite period of time. Whether it is hourly wages or piece-rate wages, they must all be computed according to the standard wages. And there is also a definite ratio or relationship between the bonuses and subsidies and the standard wages. Consequently, the correct establishment of a wage level system has a decisive significance in carrying out the principle of distribution according to labor, improving the livelihood of the staff and workers and developing their initiative.

In the wage level system currently practiced in our country, we have the eight-level wage system for workers and job level system for cadres. Eight-level

wage system is made up of the three components of wage standards, wage level table and technical level standards. The wage standards are also called wage rates. They are wages established on a monthly, daily or hourly basis. The wage level table is used to determine the wage levels and the wage differentials between the various levels. The technical-level standards are used to determine the technical levels of work and the wage levels of workers. Using these three component parts, appropriate wage differentials are established for workers with different technical levels or engaged in different types of work. The eight-level wage standards were established to differentiate between different professions, job categories and regions.

The job level system has two types. One is the job level system for industrial and mining enterprises, which is commonly referred to as the job wage system. Its characteristic is its wage standards established according to region, industry, enterprise and job classification. Each job [classification] is further divided into several levels with a number of wage standards. The other is the job level system for state agencies and state business units. Its characteristic is its relatively rough job division and the multi-level overlap for each job [classification]. It has what is referred to as the "one continuous line" of wage standards.

The current wage level system of our country was basically established according to the Soviet model in the mid-1950's. Although several revisions and additions have been made, there has not been a basic change. Some of the regulations did not even meet the actual conditions of our country at that time. Others did not appear to have too big a problem at that time, but they are no longer suitable to the changed conditions of today. And with the revisions and additions made through the years, the system now appears to be extremely confusing and irrational.

First, the wage level system is extremely complex. There are 400 to 500 various types of wage standards in the country. Irrational wage differences exist between departments, industries and types of personnel. Some wage standards are too high and others are too low. For instance, when the wage standards were established in the 1950's, the emphasis was on the importance of industry and the subordinate relationship of enterprises. As a result, industry was placed at a higher level than commerce, heavy industry at a higher level than light industry and light industry at a higher level than handicraft industry. No consideration was given to the fact that there is heavy work in light industry and light work in heavy industry, that both heavy lavor and complex labor exist in commerce and light industry and that simple labor exists in both light and heavy industries. At the same time, after staff and workers were transferred between regions, professions and enterprises, most of them retained their original wages. The result has been the abnormal phenomenon that wages can only increase and not decrease. Thus, a dozen or more or even several dozens of wage standards often exist in one enterprise, creating a situation of different remuneration for the same work.

In the wage relationship between mental labor and physical labor, because of the past undue stress on wages for the material production departments over

the non-material production departments, the wages of mental workers have generally been too low. In addition, the wage standards of these personnel have more levels, the wage differentials between levels are small, their promotion is slow and there are either no bonuses or very few bonuses. This has created the irrational phenomenon that the wages of mental workers are lower than those of the physical laborers. Despite several wage readjustments in recent years, this situation has not been basically changed.

In the relationship between regions, because of the very big changes in prices and the living standards in the various regions in the last 20 years or more and despite two readjustments, the regional wage classifications are still inconsistent with the prices and living standards in the various regions.

Second, because the work on promotion has not been carried out normally in the last 20 or more years, the relationship between wage levels and the technical levels of workers and the relationship between wages and job responsibilities and the titles of cadres have become out of line. For example, there is not much difference in the wages and remuneration of staff and workers employed since 1957 despite a very big difference in the years of work and the technical and professional capabilities between some of them and the fact that some have become the backbone in their work.

Next, the current wage level system reflects mainly the differences in the degree of complexity of labor between the various levels of staff and workers. It has no direct relationship with the quality of business and management of an enterprise. Also, the authority on wage control is overly centralized. A unified range of promotions and bonus quotas are established for various regions and businesses. Thus, regardless of how well or how poorly the enterprises are managed and how high or how low their labor productivity may be, the wages of their workers do not differ greatly. This condition of enterprises eating from the big pot of the state and staff and workers eating from the big pot of the enterprise is extremely unfavorable to production.

In summary, many problems concerning wages exist at the present time. The principal problem is a condition of leaning towards equalitarianism. This requires the establishment through reform of a set of new wage level systems which correctly carry out the principle of distribution according to labor and which also meet our country's conditions. On an overall basis, the new wage level system must meet the following four requirements.

1. It must conform to the characteristics of work and the production of the staff and workers of our country. In order to achieve distribution according to labor, the differences in wages should reflect the differences in labor. And the labor differences of the staff and workers are also closely related to the machinery installation and labor organization of the enterprises. Our country has a large population and its economy is backward. In order to solve the employment problem, we have to adopt the policy of joint development of large, medium and small enterprises and joint development of mechanized, semi-mechanized and handicraft industries. Consequently, our wage level system must be able to reflect the overall condition of the labor differences of our staff and workers in the various professions of our country.

2. The new wage level system must be able to conform with the reform of the labor system and personnel system. The personnel system now in use in our country is actually a unitary fixed labor system. It creates a situation where personnel become fixed for a long period of time once they enter an enterprise. This type of personnel system where "there is only going in and no going out" is unfavorable to the improvement of the operation and management of an enterprise and the rational utilization of the labor force and it needs reform. Many problems also exist in our country's personnel management system. For example, it lacks a firm system of cadre assessment and appointment, a firm post responsibility system with fixed staffing and fixed positions has not been established and it creates a situation of life-long leadership duties and responsibilities for cadres. At present, a condition of cumbersome organization, overstaffing and low working efficiency commonly exists in various departments, and the personnel management system also is in need of reform. The reform of the wage level system must conform with the reform of the labor and personnel systems.

3. The new wage level system must be one that not only arouses the initiative of the vast number of staff and workers to study culture and technology and improve their working capabilities but also allows them to work at their posts contentedly, so that the staff and workers at every working post in every profession will feel that they have a future and a place to go.

4. The new system must be closely related to the quality of management of the enterprises and their economic results.

Since 1978, state agencies in charge of the management of wages and specialists and scholars in the academic circles have offered many views and thoughts on wage reform. Some have proposed that the wage standards be simplified and that a scheme of "one continuous line" or "several continuous lines" be put into practice. This means combining the current wage standards of various professions and various types of personnel into a single or several wage standards and putting into practice a system with many more levels, small differences between levels and faster promotions. There are also some who have proposed the implementation of a basic salary plus wage system by posts for workers, a basic salary plus wage system by jobs for administrative cadres and a basic salary plus wage system by titles for technical and professional cadres. Still others have proposed the implementation of a floating wage system so that the wage level system will be tied to the economic results of enterprises.

From the problems that exist on wages and the opinions on wage reform, the future trend in wage reform will probably be along the following general lines:

1. In the wage level system for workers, technical jobs will continue to use the graded wage system. However, it may not be divided into eight levels but may number more or fewer levels. For workers in working posts of a high degree of mechanization and continuity, a system by posts with transitional

wages may be put into practice. For workers for whom these systems are not suitable, a system of basic wages plus longevity pay, or some other methods may be practiced.

2. Because cadres are not directly engaged in production, of the differences in their labor are reflected principally in the type of jobs they hold. For them, a wage system by jobs will probably be continued or a method of basic wages plus a subsidy according to jobs and titles may be put into practice.

3. In the future, a system of regular promotions probably will be established. When the conditions are ripe, a floating wage system may be put into practice.

II. Implementation of Flexible and Multi-type Wage Format

A wage format is the way of computing labor and paying wages. Under the socialist system, the wage level system defines labor standards and renumeration standards within a definite period of time. The wage format computes the effective labor actually produced by each staff and worker and the wages he should receive according to the standards and, thus, organically relates labor with remuneration.

The wage format has many types and many forms, with computation according to time and computation according to pieces of work as the two basic forms and with bonuses and subsidies as the supplemental forms of wages. These forms of wages have their different characteristics and are suitable under different conditions and boundaries.

The system of wage payment by the hour is a form of paying wages based on the wage level standard of the individual worker and the length of time of his work. This system is simple and easily practiced. It has a high degree of suitability and the areas where it can be practiced are relatively wide. However, it has certain disadvantages. It gives special emphasis to the extensive volume of labor in computing wages and cannot accurately reflect the intensive volume of labor or, namely, the intensity of labor. In other words, it can only reflect the labor differences between workers of different technical levels. It cannot reflect the labor differences produced within the same period of time by workers of the same level. Thus, the practice of the system of wage payment by the hour must be supplemented by a system of encouragement and reward.

The piecework wage is a form of wage payment based on the quantity of products produced by a worker that meet the standards (or work volume) and a prespecified unit price. Under certain conditions, the piecework wage can reflect the amount of labor actually produced by a worker more accurately. It can relate the wage income of a worker with the result of his labor. It can reflect not only the differences in labor performed by workers of different levels but also the differences in labor performed by workers of the same level. The correct use of the piecework wage format can produce an active influence in promoting the workers to strive to improve their technical levels, in utilizing their work time fully, in strengthening labor discipline, in

improving labor productivity as well as in developing socialist labor competition and improving enterprise undertaking and management. However, to implement a piecework wage system, there must be ample production tasks, the supply of raw materials and electric power must be normal, and, furthermore, it requires the establishment of accurate labor quotas and various enterprise management systems must be established and improved. Without these conditions, the blind implementation of such a system will actually bring losses to production. In addition, the use of piecework wages will make it easy for production workers to pursue output while neglecting to improve quality and conserve material consumption and not paying attention to the care and protection of tools and equipment and to operational safety. Consequently, to implement this system, the ideological and political education of the workers must be strengthened and the disadvantages must be placed under control when using the piecework method. For example, in using the piecework method, some enterprises stipulate that the piecework workers not only must fulfill and overfulfill their output but also must be responsible for quality, conservation, tools and equipment and production safety. Evaluation standards are established for these economic and technical indicators. When these standards are exceeded, the unit price of piecework is raised or a certain additional percentage of the piecework wage is also paid. When the standards are not achieved, the unit price is lowered or a certain percentage of the piecework wage is taken out of the pay. In this manner, the abuses of the piecework wage system are effectively overcome.

The bonus system is a form of supplementary wage and the bonus itself is a remuneration for labor above the norm. It makes up for the inadequacy of the hourly wages and piecework wages. The characteristic of the bonus system is its flexibility and it meets different needs in production. Different forms of reward systems may be established. They can be more closely and more directly tied to the quality of the operation of an enterprise and to the labor results of the workers.

The bonus system consists of the two major categories of comprehensive bonuses and single-item bonuses. When bonuses are computed on the basis of many indicators, they are called comprehensive bonuses. When bonuses are computed on the basis of a single indicator while other indicators are used as a condition of guarantee, they are called single-item bonuses. The use of comprehensive bonuses can create an overall production viewpoint among the workers and safeguards the overall completion of an enterprise's production plan. The use of the single-item bonuses can push the workers to concentrate their energy in overcoming the weak links of production and solve the key problems in production. Each has its advantages and disadvantages.

The subsidy system is also a form of supplementary wage. The subsidy is a compensation to workers who expend more labor and who pay more living expenses while working under special conditions. Consequently, in establishing a subsidy system, the relationship between general labor and special labor must be properly resolved. A subsidy should not be established for labor that is not special and above norm.

It may be seen from the above discussion that any one of the wage formats has its advantages and all of them have certain limitations. The different formats are mutually interacting and mutually supplementing. In studying exactly which format to follow, an enterprise can only decide on the basis of its own production characteristics. The wage format chosen should be flexible and should consist of many types. Different enterprises or different workshops, work sections and jobs in the same enterprise may use different wage formats and must not adopt the practice of "cutting with one knife." However, regardless of which format is used, attention must be given to its economic benefit. Generally speaking, the major problems now existing in the enterprises are the low management level, backwardness in the work on fixed staffing and fixed positions and, in some enterprises, the indiscriminate use of bonuses and subsidies. Although wages are primarily leaning towards equalitarianism, there are still some large differences and the problem of unevenness of hardship and joy. This requires the reform of labor organizations and wage formats so that wages will truly develop their lever influence in production.

III. Expansion of Self-determination Authority of Enterprises and Implementation of Wage Management at Different Levels

The wage system and the wage management system are closely related. Many of the problems on wages are caused by problems in the management system. For a long time now, the wage management authorities in our country have been overly centralized and overly unified. The enterprises do not have any self-determination authority in wage distribution and this is unfavorable to the development of initiative in various areas. From now on, the self-determination authority of enterprises should be expanded and wages should be separately managed at the central government, local area, department and enterprise levels. The principle of the system reform should be centralized management where it should be centralized and dispersed management where it should be dispersed, and it should be centralized without being implacable and lively without being chaotic. The relationship between centralized authority and separate local authorities should be properly taken care of. On the ideas of reform, there are in general three different opinions.

One idea advocates that the central government be responsible for the establishment of wage policies and laws and for wage planning and that the wage standards of state agencies and state business units also be established by the state on a unified basis. The wage standards and many types of wage systems for enterprises are to be established by the local areas, departments or enterprises themselves. The central government would only control the total amount of wages. An enterprise would contract for its own total wages with room for fluctuations depending on the success or failure of its operation. The wage relationship between departments and enterprises would be regulated through taxation.

Another idea advocates that in addition to a unified establishment of wage standards of state agencies and state business units by the state, the wage standards of state-operated enterprises, at least for those operated by the provinces and higher levels, should also be established by the state on a

unified basis. Several wage standards could be established for enterprises with similar production characteristics. The local areas and departments should have the authority to determine the wage standards for individual enterprises based on the individual technical level of production, its contribution to the state and its current wage conditions. Some subsidies would be established by the state on a unified basis while others would be established by the local areas and the departments. For other systems, such as the worker promotion and bonus reward ones, the authority would be given to the enterprises to establish themselves within the boundaries of the total wage figures specified.

The third idea advocates that the wage standards for work common to state agencies, state business units and enterprises should be uniformly established by the state. For other workers, the state could establish controls in terms of the lowest and highest wage standards. The wage standards and various wage systems would all be established by the enterprises as long as they do exceed the total wage figures and other conditions established by the state.

Each of the three ideas has its advantages and disadvantages and its practicability requires further study. However, most people are leaning toward the second idea. They believe that in order for us to develop our socialist economy with planning, correctly take care of the relationship between accumulation and consumption and properly adjust the relationship between regions, between departments and between professions, it is better that in principle, the wage standards of state-operated enterprises be established on a unified basis. If the establishment should be unified and it is not unified, the control on wages will be lost and it will be difficult to remedy.

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CSO: 4006/452

REPLACING PROFIT DELIVERY WITH TAXATION DISCUSSED

Beijing CAIMAO JINGJI [FINANCE, TRADE AND ECONOMICS] in Chinese No 3, 11 Mar 84 pp 45-47

[Article by Yuan Zhenyu [5913 2182 1342], Finance Department, China People's University: "Create Conditions for Second Step of Replacing Profit Delivery with Taxation"]

[Text] I. Necessity of Replacing Profit Delivery with Taxation in Two Steps

Replacing profit delivery with taxation in two steps is an important decision of the State Council after full deliberation and preparation and in accordance with China's concrete national conditions. The first step has now been implemented and, according to the conditions of the various areas, the results are good. They are mainly as follows: (1) As a result of the 55-percent income tax on the profits of state-owned enterprises, the major portion of state revenue will come from taxes, and the distributive relations between the state and the enterprises will be embodied mainly in taxation. (2) Income tax is a compulsory levy and its rates are fixed. The enterprises must pay in full according to the prescribed schedule. (3) By means of the income tax, the state can strengthen its inspection and supervision of the financial activities of the enterprises, thereby impelling them to improve business accounting, operation and management and economic results. All these advantages are not found under the practice of retaining a percentage of the profit.

Therefore, compared with retaining a percentage of the profit and taking responsibility for profit or loss, the first step of replacing profit delivery with taxation is doubtless an improvement and, in terms of the entire changeover, has a crucial significance. Without the first step, the second step would have been difficult to conceive. Nevertheless, the first step itself has its limitations, which are mainly manifested as follows:

1. The profit after tax must still be allocated between the state and the enterprises in manifold forms; therefore, the distribution is not completely free of the restrictions found in the practices of retaining a percentage of the profit and taking responsibility for profit or loss, such abuses as scrambling for bases and for proportions have not been basically eliminated and unstable factors are still found in the distributive relations between the state and the enterprises.

2. According to the current practice, the income tax has three rates, specifically, the 55-percent proportional rate on large and medium enterprises, the eight-level progressive rate on small enterprises and the 15-percent proportional rate on food, beverage and service enterprises. The practice is incompatible with the principle that more income means more tax and less income means less tax, nor does it solve the problem of unfairness under profit retention.

3. As the current adjustment tax is computed according to the enterprise profit after paying tax, and deducting the part that should be retained, it has to be one rate per taxpayer. It is actually a sort of payment to the state according to fixed proportions. Strictly speaking, it is not a tax.

4. The abolition of the fund use charge under the current measure of changing over from profit delivery to taxation is unfavorable to fund conservation by the enterprise.

The above discussion shows that the measures under the first step of the changeover are not all perfect. We must, on the basis of consolidating the achievements, continuously summarize the practical experiences, consider the ways of improvement pinpointed at the existing problems and make preparations for the second step of the changeover.

II. Crucial Problems in the Second Step of the Changeover

The second step of the changeover is much more complex and difficult than the first step, and its impact on the entire national economy is much broader and deeper. The crucial problems in the second step are mainly as follows:

1. We must solve the problem of income differentials between the enterprises, i.e., how to enable them to compete from roughly the same starting line and under equal conditions. While the wide disparities between the profit levels of the enterprises are doubtless the problem of production and operation, such objective factors as prices, resources, equipment and communications and transportation also play a considerable part, especially in influencing price ranges. In a situation where the pricing system is irrational, it is very difficult to measure the quality of enterprise operation and the size of contribution to the state by the amount of profit. Under such conditions, it is hard to implement the principle of material benefit and solve the problem of unfairness in distribution between the enterprises. It is unfavorable to strengthening state control over the macroeconomy and, what is even more serious, to further enlarging the enterprise self-determining power and establishing and reinforcing the economic responsibility system. Therefore, to implement the second step of the changeover and make the enterprises take responsibility for profit or loss, we must readjust and reform the irrational pricing system, so that the profit levels will roughly reflect the enterprise's actual production and operation. If the pricing system after reform becomes fairly rational and the enterprise profit level basically reflects the quality of operation, we will be able to progress fairly smoothly from the first step of the changeover to the second.

With regard to the problem of the income differentials between the enterprises, many comrades feel that when it is impossible to make fairly large adjustments of prices, regulation may be accomplished by taxation. Income differentials due to differences in resources, for instance, may be solved by levying a resource tax; those due to differences in equipment may be solved by levying a fund use tax and those due to the price factor may be solved by raising or lowering the product tax rates. Their views are quite rational. Under the situation where the pricing is not adjusted, the income differentials between enterprises may be suitably regulated by designing different tax categories and rates. However, we must realize that taxation is after all a part of the product price, and only by coordinating it with price will it produce the proper regulatory effect on the enterprise income differentials. If we walk on one leg and focus only on taxation, it will be extremely difficult to solve the income differentials between the enterprises. Though taxation will produce a regulatory effect on income differentials, due to its uniform and fixed nature, the designing of its categories and rates cannot vary according to the enterprises; therefore, its regulatory effect cannot but be greatly restricted. In regulating the income differentials of the enterprises, while we must not overlook the role of taxation, we must not unduly exaggerate it. The reforms of taxation and pricing should be treated as a whole and coordinated.

2. We must solve the issue of just how much self-determining power the enterprise has and what is the appropriate proportion of profit retained by the enterprises. The amount of profit retained is directly connected with the designing of the tax categories and rates. If this issue is not solved, there will be no scientific basis to implement the second step of the changeover and solve the distributive relations between the state and the enterprises. In solving the issue, we must start from the developmental level of China's current productive forces. Due to various historical factors, the level of China's productive forces cannot be considered high, and the economic development is very uneven. To change the situation gradually, the social expanded reproduction should be planned mainly by the state, and the funds needed should be provided mainly by the state; therefore, the financial resources retained by the enterprises should not be excessive. The enterprise financial resources are used mainly to satisfy the needs of renewal, remolding and technological progress and to improve the workers' collective welfare, not for the purpose of extensive expanded reproduction. Starting from this understanding, the planning of the tax categories and rates must both guarantee that the necessary funds be concentrated by the state on the one hand and activate the enthusiasm of the enterprises and workers and fully bring out the inherent economic vitality of the enterprises on the other.

3. We must properly solve the distributive relations between central and local finances. The issue involves the limits of the management power of the local governments. Firmly upholding the unity of affairs and financial powers is an important principle to solve the distributive relations between the central and local governments, but just how wise is the sphere of responsibility of the local governments must be further studied. Only when these problems are clarified will it be possible to determine the central, local and joint central and local taxes.

4. We must launch a reform of the entire tax system. In implementing the changeover from profit delivery to taxation on state-owned enterprises, while we must, on the one hand, correctly handle the relations between the interests of the state, the enterprises and the workers and guarantee the steady growth of state revenue, we must, on the other hand, fully develop the role of taxation as an economic lever and make effective adjustments of the production and operation activities of the enterprises. To fulfill the tasks in these two aspects, levying an income tax on enterprise profit alone is inadequate, and a reform of the entire tax system must be launched. In other words, the second step of the changeover from profit delivery to taxation is actually an issue of tax reform. Where do we start the reform? Many comrades advocate reforming the industrial-commercial tax, introducing products, business and value added taxes and focusing on product taxes. We should say that the direction is correct, because a product tax is levied according to the volume of product circulation. The advantages are as follows: (1) The enterprises pay a tax on their sales receipts and are not affected by changes in cost. The tax has the effect of fully guaranteeing the revenue. (2) The tax rates are designed according to the profit of the products, and different rates are charged for the different product profit levels; therefore, the tax serves to regulate the enterprise profit level in conjunction with price, thereby regulating production and consumption. (3) Identical rates on identical products serve to encourage the advanced and propel the backward, thereby promoting improvement in enterprise operation and management, reduction of cost and enhancement of economic results. (4) Levies on the sales volume facilitate computation and prompt payment. These advantages are not all found in other tax categories. However, while stressing a product tax, we must not overlook the role of income tax and regard it as insignificant, because it is the ultimate expression of the proper distributive relations between the state and the enterprises.

5. In addition, organizational preparations must be made when progressing from the first step of the changeover from profit delivery to taxation to the second step. When the changeover is completed, the load of the taxation branch will become much heavier, with new and higher requirements on its work. Thus, starting from now, we must gradually reinforce and strengthen the tax mechanism and improve the policy level and business capacity of the personnel. Only thus will we adapt to the new conditions and properly perform the tax work of the new period. In terms of enterprise financial and accounting personnel, there is also a problem of training and improvement.

We can see from the above analysis that a large amount of preparatory work must be done before implementing the second step of the changeover from profit delivery to taxation. The more fully the preparatory work is done, the more smooth will be the implementation of the second step.

III Two Questions of Understanding

One question is whether the state will, in form of taxation, completely centralize the profit of state-owned enterprises which should be delivered to it. Currently some comrades are doubtful of whether the practice of profit delivery to the state can be thoroughly abolished. I feel that the

question can be solved. On the one hand, the price of products must conform as much as possible to the value; on the other hand, the enterprise profit level must be regulated by means of manifold tax categories and rates. With regard to whether the state will be able to centralize completely the profit which should be delivered to it, the last defense is the income tax. Therefore, the income tax rates should be as meticulous and rational as possible and embody the characteristics of the popular ownership of state-owned enterprises. Where the enterprise profit retention has reached a certain limit, it is conceivable to levy on above-norm progressive tax of 80 percent, 90 percent or even 100 percent. Where the retention is excessive, the state may resort to other economic regulatory measures. When the issuance of bonsues exceeds state provisions, for instance, an above-norm bonus tax may be levied; when the capital construction funded by an enterprise itself goes beyond the sphere permitted in the plans, a construction tax may be levied. Therefore, the practice of profit delivery to the state can be replaced completely by taxation.

The second question is whether state-owned enterprises can take responsibility for profit or loss. Some comrades feel that in case of loss, a state-owned enterprise will not be permitted to collapse, and the state will have to render support. In addition, in terms of the approximately 25 percent of state-owned enterprises today which are unprofitable, it is very difficult for them to take responsibility for profit or loss. I feel that the profit or loss responsibility on the part of state-owned enterprises is taken within a certain sphere and under certain conditions. Mainly it means that the enterprises must undertake certain economic responsibilities toward the state and for the results of production and operation, thereby basically changing the large-pot-of-rice phenomenon of the past and linking the material benefit of the enterprises and workers with the quality of operation. If an enterprise is successful in its operation, it will retain more financial resources and possess a greater capacity to develop production, and its workers will receive more material benefits. Conversely, if an enterprise is unsuccessful in its operation, or even suffers a loss, the material benefits for the enterprise and its workers will reduce. Thus, the enterprises will feel a pressure, knowing that they cannot survive if they fail to strive and progress. Only thus will it be possible to activate their enthusiasm and creativity, bring out fully their inherent vitality, train a large group of astute and capable businessmen, basically improve the enterprise quality, raise the operation and management levels and enhance the economic results of the whole society. Naturally, in case of loss, the state must take necessary measures and help with the reorganization. It will not be surprising if some enterprises should collapse because of unsuccessful operation. However, the closing, merging and conversion of enterprises must be subordinated to the overall interests of the national economy, and the workers must be provided with the opportunity to earn a living. With regard to the considerable number of unprofitable enterprises at present, concrete analyses must be made. One kind of loss is of a policy nature, and the loss can be transformed to profit by readjusting the prices and taxes. In the case of those who still suffer a loss after such readjustments, the measure of tax reduction may be resorted to, and these enterprises will, within the range of the reduced taxes, take responsibility for profit or loss. Another kind of loss is operational. Enterprises suffering loses of this kind must launch reorganization within a time limit.

If no change occurs, the necessary measures of closing, merging and conversion must be implemented. In addition, in the case of the enterprise profit level directly affected by the momentous policy measures taken by the state, the tax rates should be reajusted in order to maintain the deserved enterprise profit. If the tax rates are not readjusted, the necessary subsidy must be granted. This practice not only does not violate the principle of taking responsibility for profit or loss on the part of state-owned enterprises but embodies it.

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EFFORTS TO IMPROVE AVAILABILITY OF 125 MW UNITS

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[Article by Chen Huyuan [7115 3337 0337] of the East China Electric Power Management Bureau]

[Text] The East China Grid has 19 domestically produced 125 MW generators, two 120 MW generators manufactured in Poland, as well as one Italian-made 125 MW steam turbine and one Czech 110 MW steam turbine. Both of the latter are adapted to domestically produced 400 t/hr boilers. The total is 2,850 MW. This is a backbone force for guaranteeing safe power generation in the grid. The domestically produced 125 MW generators have inherent deficiencies and several weak links. They are often forced to shut down, thereby making the power network passive. In order to promote improvements in large generators and raise the levels of safe, economical and stable operation, the East China Electric Power Network Conference decided in August 1979 to develop competition among large generators throughout the network. Contracts were signed to formally begin the "five comparisons" (compared safety, compare operation time, compare equipment conditions, compare economic standards, and compare technical management). This involves competitive activities among similar 125 MW generators. Comparisons are made every half year. There have been seven comparisons in the past 3 years. Some 182 different written informational reports have been prepared on experiences in improvements, overhaul, operation, energy conservation, and other areas. The results of using competition to promote various phases of the work are obvious.

The attached table illustrates the advances in operation levels since the competition began. First of all, there has been an increase in safety levels, as well as an obvious decrease in the number of accidents. The accident rate dropped from 2.8 per unit per year in the last half of 1979 to 0.4 per unit per year in the same period in 1982. The number of blockages and temporary repairs also decreased. The Number 15 generator in Zhabei, the Number 5 generator in Wujing, the Number 4 generator of Huainan and the Number 2 generator at Xuzhou set record averages of over 1,000 days of operation without an accident. Second, there has been an obvious increase in equipment availability. Average availability increased from 81.5 percent in the last half of 1979 to 88.9 percent in the same period in 1982. This newly-exploited potential is equivalent to 1.7 250 MW generators. Third, there have been gains in economic standards, such as an increase of 6.9°C in main steam temperatures, an increase

Table: Operations Standards Over Time for 125 MW Similar Model Generators in the East China Electric Power Network

Number of Units and Items of Competition	Units of Measurement	Time Period: Last Half 1979	First Half 1980	Last Half 1980	First Half 1981	Last Half 1981	First Half 1982	Last Half 1982
Number of Generators participating in the competition	units	18	21	21	23	23	23	33
Accident rate	accidents/unit/year	2.8	1.1	1.1	1.0	0.4	0.8	0.4
Blockage rate	blockages/unit/year	7.4	3.3	3.1	4.4	4.7	3.8	5.4
Temporary repair rate	repairs/unit/year	6.1	3.8	3.0	2.3	3.4	1.9	3.0
Control time	hours	3,000	3,515	3,725	3,445	3,836	3,737	3,929
Availability	percent	81.5	80.4	84.3	79.3	86.8	86.0	88.9
Equipment completeness rate	percent	80.5	95.2	94.0	95.7	100	100	100
Peak load operation rate	percent	72.1	90.9	97.0	96.7	95.7	96.5	97.7
Main steam temperature	°C	534.3	535.8	536.1	536.1	537.3	539.3	541.2
Reheated steam temperature	°C	532.9	531.1	532.5	532.7	534.0	535.2	538.2
Main steam pressure	kg/cm^2	132.7	125.5	127.4	125.3	125.9	128.5	131.7
Water supply temperature	°C	223.1	224.5	230.1	230.4	230.1	231.5	233.8
Leakage rate	percent	21.4	17.8	17.7	16.1	13.8	13.3	12.2
Fan electricity consumption	kwh/ton of steam	4.87	4.76	4.85	4.84	4.66	4.62	4.57
Pulverizer Electricity consumption	kwh/ton of coal	30.1	32.5	30.5	31.4	30.8	29.6	28.9

of 5.3°C in reheated steam temperatures, and an increase of 10.7°C in water supplies from the last half of 1979 to the last half of 1982. Some 48,000 tons of standard coal were saved for the state in just these three items over 3 years.

The initial stages of developing competition among similar generators involved the following:

1. Generators of the Same Type Have Fixed Characteristics, Their Differences Are Obvious, And It Is Easy to Set Up a System of Competition for First Place.

Minute indexes of requirements and standards are drawn up for safety, operation and economic questions to clearly define the conditions of competition. The results were summarized on a semi-annual basis. Points were awarded for each standard that is met, and not awarded for any standards that are not met. The first to reach 85 points is the winner. In this way, it is possible for each to clearly see their differences. For example, there were great differences in operational rates for high-pressure heaters when the first comparison was made. Some generators had reached 100 percent [operation rates], while others were only 21 percent operational or not operational at all. The average was 72.1 percent. Through competition and exchange of experiences, all the plants concentrated on improving high-pressure heaters and measures to seal leaks, and were able to rapidly increase operation rates. Beginning in the fist half of 1980, the 23 generators attained an average stable operation rate of over 95 percent.

2. Similarities in Generating Unit Equipment Means Common Problems Are Encountered, and Experiences Are Easy To Transfer.

There are a lot of problems with domestically produced 125 MW generators. In order to increase equipment availability, work must be done to make improvements, and any necessary measures in operations must be adopted to overcome weak links in the equipment. For this reason, during the second to fourth experience exchange activities, the exchanges were done in turn for generators, boilers, and electrical specialization. Equipment problems were faced head-on, summaries of experience were exchanged, and special topics were discussed. Because everyone was interested in these questions, the exchanges went quite deep, and work benefited greatly.

3. Competition Activities Among Similar Generators Has Promoted "Tackling Key Problems" and Equipment Improvement.

Several common but unsolved problems appeared during the competition activities among similar generators, requiring the organization of forces to "storm strategic passes." For example, in specialized exchanges on boilers in March 1983, everyone realized that several of the 400-ton-per-hour boilers had not had experimental temperature adjustments. Operations tended to be blind and were not only uneconomical, but unsafe as well. On-the-spot discussions and agreements were made to grasp this point in every province and municipality. Joint experiments on a boiler were carried out jointly by the central experiment office and the related power plant to readjust burning. The best operating formulas were selected, and operating formula cards prepared. After gaining experience, it is disseminated. Demonstration work has been completed, and gradual extension is underway.

Because the hydroelectric generating capacity of the East China Grid is somewhat small, there have been increasing gaps in load peaks and valleys in recent years, and the task of load regulation has inevitably fallen to the large generator units. This has been most apparent during high-water seasons. The original 125 MW generator designed by the generator manufacturing plant was taken as the basic load generator. On the basis of safety and reliability, its adaptability was closely measured through a great deal of experimentation and research. The East China Electric Power Experiment and Research Institute did a series of experiments in the Zhabei, Wujing and Minxing plants, and derived the lowest permissible load and load change rate for oil-fired and coal-fired burners. An evaluation checklist was put together after exchange and discussion.

Because the economic [efficiency] of domestic-made 125 MW generators is fairly low compared to similar foreign-made generators, energy conservation measures were exchanged at key points during the fifth exchange of experiences.

4. Competition Between Similar Generators Has Promoted Fundamental Work

Fundamental work is an important link in raising equipment availability rates. In the sixth and seventh experience exchange conferences, the key points were exchange of experiences related to overhaul and operation. Each plant introduces its experiences in implementing the "25 articles on overhauling" and the "25 articles on operations" promulgated by the network management bureau. Everyone came to understand that the two "25 articles" were the foundation of work in electric power plants. The power plants also disseminated the "superior overhaul work responsibility methods" of the Minxing and Zhabei power plants. There were obvious improvements in the quality of generator overhauls, and there was a universal increase in the number of continuous operating days after the major overhauls. For example, the Number 10 generator at the Minxing plant reached 225 days, the Number 16 generator at the Zhabei plant reached 208 days, and the Wujing heat and power plant Number 5 generator reached 198 days.

The competition activities promoted management work. Unified statistical reporting forms and components were prepared by each power plant according to the requirements for comparison and submitted on a regular basis. Statistical analysis within the power plants was thereby strengthened.

5. Closely Examine the Basis for Comparisons and Make Frequent Improvements According to Conditions to Guide the Competition Activities.

When we began drawing up the conditions of competition between similar generators and put forth the "five comparisons" mentioned previously, it was felt that after a year of practice, there was a correct standard for deducting time for temporary repairs from the standards for control time. This standard played a major role in the evaluations.

However, due to a lack of strict standards for comparison of technical management, these norms didn't play an important role. In addition, it was difficult to explain problems in standards for equipment completeness due to the great differences between equipment grading standards between plants. For these

reasons, during the process of revision, technical management standards were eliminated, the number of equipment completeness rates was reduced, and the number of rigid standards was increased. Completion of the assignment of extra points and load regulation evaluation brought the focus of competitive activities even more on investigations of availability rates, as well as safety, economics, and operation levels.

Because of a lack of experience in competitive activites, there were quite a few problems. For example, there were several accidents due to explosions in the four pipes (the water jacket, the superheater, the reheater and the economizer) of the 400-ton-per-hour boilers. Accidents from water leakage in the generators were still not eliminated, efficiency declined after reinforcement of turbine bulkheads, and the conditions of competition and evaluation norms were too elaborate.

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COUNTRY FAIR TRADE DEVELOPS IN ZHEJIANG

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[Article by Huang Zhengxue [7806 2973 1331]: Zhejiang Provincial Administration Bureau of Industry and Commerce: "Develop Country Fair Trade Guided by a Planned Economy"]

[Text] The characteristics, position and function of the country fair trade have been further defined since the 3d Plenary Session of the 11th Party Central Committee. With the further consummation of the household responsibility system linking remuneration to output in the rural areas and the reconstruction of the economic system on the premise of upholding the planned economy, the country fair trade in both the cities and the rural areas of Zhejiang Province has obtained a faster recovery and development. First of all are the increases in the number of networks and the gradual rationalization of distribution. In 1979, there were 1,270 country fair trade networks in the entire province, an increase of 219 over that of 1978. No country fair trade existed in the cities at that time. However, by 1980, the number of country fair networks reached 1,415, an increase of 145 over the previous year, of which 78 were in the rural areas and 67 were in the cities. By 1981, the number increased to 1,665, an increase of 250 over the previous year, of which 181 were in the rural areas and 69 in the cities. By 1982, it reached 1,736, 71 more than the previous year, most of which were in the rural areas, while the number in the cities stayed the same as the previous year. Currently, in addition to the gradual increase in larger country fairs, there have also emerged, as the times require, some smaller country fairs in the communes, markets and towns with 20-30 or 30-40 people together running a shop and carrying out commodity exchanges. According to an investigation done in Xiaoshan County, there are 30-odd country fairs of this kind. Second, there has been a larger increase in the amount of money transacted in the country fair trade, the development of which grows more and more normal. The number of business in 1981 and 1982 increased by 20.3 percent and 23.1 percent, respectively, over the previous year; the country fair turnover compared with social commodity retail turnover increased by 9.4 percent and 12.1 percent, respectively. This is mainly due to the adjustment of policies which extended the market regulation. However, the business volume of country fair trade (discount price) was only 10.58 percent that of the social commodity trade in 1982. The proportion is still very low.

In recent years, the rate of increase of agricultural and sideline products which the peasants sell in the country fairs is higher than what they sell to the state in both quantity and net earnings. Peasants as well as town residents are very active buying things in the country fairs in the rural areas, thereby increasing the amount of business there. The foodstuffs in the country fairs in the cities have become an essential source for the residents' consumption.

Changes in the Country Fairs in the Cities and Rural Areas

With the development of commodity production, as well as increases in the amount of business done in the country fairs in the cities and rural areas, new changes have appeared at the fairs:

(1) The transformation of country fair trade from a self- and semi-self-sufficient economy to a commodity exchange economy. With the development and consummation of the household responsibility system linking remuneration to output in the rural areas, the appearance of a large number of specialized and priority households and the great increases in commodity ratio, more and more commodity exchanges are carried on through country fairs. According to research on 18 country fairs, about 50 percent of the commodities of specialized and priority households are sold at country fairs. The amount of business of various kinds of commodities in the country fairs has increased by a great deal. The amount of grain sold in the country fairs from January to September in 1983 was 370 million jin, an increase of 34.4 percent over the same period of the previous year; pork 90.70 million jin, an increase of 50.6 percent over the same period of the previous year; fresh eggs 44 million jin, an increase of 25.29 percent over the same period of the previous year; and poultry 42 million jin, an increase of 31.1 percent over the same period of the previous year.

Due to the sharp increases in the quantity of commodities as well as the increase in the degree of specialization and socialization, the number of people who engage in the transporting of goods for sale at the country fairs has increased, while the proportion of self-production and marketing declines. The proportion of people transporting goods for sale at the country fairs of Hangzhou, Ningpo and Wenzhou Cities is 70-80 percent, of Shaoxing and Jinhua Cities 50-60 percent, and of ordinary towns 30-40 percent. On 19 February this year, the number of people engaged in transporting goods for sale at the Jiangnan country fairs in Yuyao Zhen, Yuyao Xian, was 292, making up 31 percent of the total sellers. Of the 292 people, 199 were engaged in seasonal business while 93 were in year-round businesses. They transport small aquatic products, vegetables, fruit and agricultural and sideline products which are allowed to be sold on the market when the assigned and centralized task is fulfilled as well as third-category and small industrial commodities, thereby further expanding the exchange of industrial and agricultural products between the cities and the regions.

(2) The country fair has been gradually transferred from that of agricultural and sideline product exchange into large-size composite markets composed of various kinds of specialized markets. With the appearance of more and more varieties of commodities on the market, some small-size agricultural and sideline product markets gradually become exchange markets specializing in

different kinds of commodities such as firewood, piglets, farm animals, vegetables, melons and fruits, poultry, feed, flowers and plants, bamboo handicrafts and aquatic products, etc. as well as markets specializing in industrial product and handicraft exchange, etc. Of these, the proportion of the business volume of industrial products at the country fairs grows bigger and bigger with the development of commune and brigade enterprises and household handicraft industries and with the increase in the number of commodities they put on the market. In 1980, the number of industrial products sold at the country fairs was worth 47.02 million yuan, making up 4 percent of the business volume of the country fairs; in 1981 it was 80.58 million yuan, 6.04 percent of the business volume; and in 1982 it reached 134.92 million yuan, 8.41 percent of the business volume.

The appearance of specialized brigades and specialized villages has been accompanied by the appearance of specialized exchange markets. Of its over 12,500 members, Yungkang Xian's Silu Commune has over 2,500 members engaged in embroidery production. With the over 2,150 sewing machines they own, they produce about 2 million pieces of machine-embroidered products a year. Besides sending over 1,200 members to go out to sell these products, they also set up a specialized machine-embroidered products exchange market at the place where the commune is. At every fair over 800 members sell their products while merchants from other places come to purchase them. Business is very brisk. Besides a small quantity which are suitable to be sold locally, most of the commodities have to be transported to other places to sell. Thereupon some exchange markets which sell goods by the batches appear. For example, the small commodity market of Yiwu Xian's Choucheng Zhen has over 700 shops with over 1,340 people at every fair. The commodities include small articles for daily use, hardware, knitwear, plastic goods and over 2,100 types of children's toys. The number of people going to the fair exceeds 3,000. The turnover of commodities sold at each fair amounts to 80,000 yuan, most of which are sold by the batch and transported to provinces and cities such as Yunnan, Guizhou, Nei Monggol, Liaoning, etc. The appearance of these specialized markets not only promotes the development of commodity production and helps the masses' daily needs but also provides the peddlers with resources for goods and expands the commodity exchanges among different regions.

(3) Many village country fairs have gradually developed into economic activity centers, even into the embryonic form of new towns. With the expansion and briskness of the country fair trade, many country fairs have changed gradually from periodic fairs to daily ones. Some morning fairs and midday fairs in the past have also gradually become all-day fairs with a large amount of business and a lot of people coming to the fairs. In order to adapt to this change, some professions which serve the masses such as catering, service, transportation, repairing and processing have also gradually developed. Some state-run and collective businesses have, one by one, also set up some networks in the fairs for supply and purchasing, some communes and brigade enterprises have stores open there to do business and some individual industrial and commercial households rent houses to do business. With all those plus the development in various aspects, the market town economy has gradually recovered and developed. It plays an important role in sending agricultural and sideline products into the cities while sending industrial products into the rural areas and establishing the commodity exchange system based on the cities and makes market towns distribution centers.

Ways to Bring into Play the Complementary Function of the Country Fair Trade

The following is what I believe has to be paid attention to in order to bring correctly into play the complementary nature of the country fair trade under the guidance of economic planning:

(1) Insistance on the centralized purchasing and assigned purchasing policies for agricultural and sideline products. Centralized and assigned purchasing tasks which are mandatory plans are important measures in carrying out planned regulation. The function of market regulation should be brought into play under the guidance of the planned economy, and not pound at the plans of the state. Therefore, the management of country fair trade should be strengthened and the completion of centralized and assigned purchasing tasks guaranteed. The state's purpose in carrying out the centralized and assigned purchasing of essential agricultural and sideline products, at a time when there is no significant per-capita increase of essential agricultural and sideline products and when the conflict between supply and demand is relatively outstanding, is to utilize commodity resources rationally. It is important that economic policy solve the supply and demand conflicts of several important agricultural and sideline products. To cancel centralized and assigned purchasing will doubtlessly result in chaos. However, the range of assigned purchasing should not be too large. Products which have little to do with the national economy and the people's livelihood and which are important agricultural and sideline products but whose production is scattered should not be listed in the range of assignment. As for third-category agricultural and sideline products which are within the range of market regulation and are for free purchasing and marketing, they should not be listed for assigned purchasing.

(2) Insistance on the principle that buyers and sellers in country fair trade do their business and negotiate prices freely. Currently, due to the outstanding demand and supply conflict of some commodities, which causes the prices in the country fairs to go up and results in a lot of complaints among the masses, some places attempt to replace objective laws with some administrative measures by laying down strict prices on the country fair trade. Country fair trade, which is a free market under the guidance and management of the state, is an important component of market regulation. There is a lot of flexibility and adaptability to the production and marketing of products which are allowed to be sold on the country fairs. There is still a long time to go before they can be brought into the orbit of planned production and planned circulation. We can only, through the free negotiation of prices between buyers and sellers, let the prices rise and fall with the change of the supply and demand of commodities on the market. The production condition and the conflict between supply and demand affect and regulate the prices in the country fairs. The country fair prices as a return affect and regulate the production and supply and demand. This is determined by the characteristics of the country fair trade.

Currently, the business volume of country fair trade makes up only 10 percent of the social commodity turnover. It is 10 percent of the social commodity turnover. It is only a small proportion within the domestic centralized socialist market. Besides the few factors which are related to the country fair

trade itself, the prices at the country fairs are determined and influenced by the supply and demand condition of commodities in all the domestic markets, the changes in planned prices as well as relevant policies and measures. When the supply and demand of commodities in the domestic market are basically balanced and the money supply in the market basically adapt to the commodity supply, the prices of country fairs will approach the state's planned prices. On the contrary, if the supply of commodities does not meet the demand in the entire domestic market, there will be a big gap between the prices of country fairs and that of the state's plan. Therefore, when the prices in the country fairs go up, state-run businesses and supply and marketing cooperatives instead of adopting simple restrictive measures to limit the prices should enthusiastically organize resources of goods and do the supply job well so as to bring down the market prices.

(3) Adopt a correct attitude toward individuals who transport goods to sell. From the point of view of practice, ever since the adoption of various forms of the production responsibility system which causes the division of labor to become finer and finer, some people leave their old cultivation jobs and specialize in commodity production such as duck raising, chicken raising, weaving, collecting and processing. As a result of the division of labor of production, supply and marketing, it is inevitable that some people specialize in the transportation of goods to sell. Moreover, while after fulfilling the state-assigned tasks some products will still have some surplus, some products are very hard for state-run businesses and supply and marketing cooperatives to purchase, and, therefore, some people will have to transport the goods to sell. A certain kind of production form will need a certain kind of circulation form. The circulation channel should adapt to the production form.

What the state currently allows individuals to transport goods to sell is absolutely different from speculation and profiteering. Legitimate transportation of goods to sell is strenuous physical labor. It is the continuation of material production in the process of circulation. The transportation of goods for sale, as workers and farmers engage in industrial and agricultural production, is an integral part of labor in the general course of social production. Without this, some products will not be able to reach the consumers successfully and production will not be able to be transformed into consumption. Some people even purchase the commodities from the farmers and, through their own physical labor, transport the goods in their hands, on their shoulders and on their bicycles to the towns to sell to the consumers, thereby shifting the position of products put in the realm of circulation. In the process of shifting, the transportation of goods is not any easier than some production labor, whether it is because of the complexity of labor or the drain on physical strength. This is why the legitimate transportation of goods to sell is valuable labor the society needs. The country fair trade can be even more brisk only when legitimate transportation of goods is protected and reselling at an illegitimate profit is halted.

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DOMESTIC TRADE

LAW OF VALUE, PRICING POLICY

Beijing JIAGE LILUN YU SHIJIAN [THEORY AND PRACTICE OF PRICING] in Chinese
No 2, 20 Mar 84 pp 8-10

[Article by He Jianzhang [0149 1696 4545]: "The Law Of Value And Pricing Policy"]

[Text] Comrade Hu Yaobang in his report on the 12th Party Central Committee pointed out: "When carrying out plans, be they mandatory plans set by the state or non-mandatory guideline plans, we must see that they accord with objective reality, constantly investigate changes in market supply and demand, consciously use the law of value and use economic levers such as prices, taxes, credits, etc. to persuade the enterprises to fulfill the demands of the national plan, giving the enterprises varying powers of initiative. In this way the plan will, in the course of its implementation, be replenished and completed as necessary." This discussion illuminated the role of the law of value in our nation's socialist economy as well as the correct pricing policy which we should adopt.

Why do we need to use consciously the law of value and the pricing policy economic levers in planning and management? This should be approached from the role that the law of value plays in a socialist economy. In the past, people believed that the primary basis of planning and management are the fundamental socialist economic laws and the laws of the planned proportionate development of the national economy but that the law of value is the economic law of a commodity economy which only works in places where commodity production and exchange still remain (such as in the exchange relationship between owners of different commodities). For this reason, if the law of value is still to be used in socialist planned management, it can only be used within this range. As far as the planned management of the entire national economy, particularly those mandatory plans, is concerned, it is a matter of how to limit its function. Practice proves that these kinds of incorrect ideas and behavior which reject the use of the law of value in planned management bring serious damage to the socialist construction of our nation.

Of course, it goes without saying that the primary basis of socialist planned management is socialism's fundamental economic laws and the law of the planned proportionate development of the national economy. Fundamental socialist economic laws determine that the purpose of social production is to satisfy

the society and the continually growing material as well as cultural needs of its members. The law of planned proportionate development, on the other hand, requires that each department in the national economy be coordinated in its development. However, to realize the requirements of these two laws, the function of the law of value is indispensable. Marx said: "Everybody knows that to acquire the quantity of products which adapts to the varying demand, a certain amount of various kinds of social general labor has to be invested. The necessity of this kind of proportionate distribution of social labor can never be replaced by any certain form of social production. What can be changed is only the form of its expression ("The Selected Works of Marx and Engels" Vol 4, p 368 [Chinese edition]). In the capitalist system, the proportionate distribution of social labor is realized through the law of value which works behind the producers and the prices which automatically fluctuate with the value (or production costs), thereby promoting the flow of social capital among different departments. In the socialist system, because of the realization of the public ownership system of the means of production, the anarchy of production gives way to the people's planned regulation of social production. That is, the people can consciously distribute the social labor according to a proportion. However, this does not mean that the people can ignore the function of the law of value and distribute social labor as they please. Because the law of value is a law determined by the value to begin with, in other words, the social labor spent on something determines its value, "the law of the value of commodities determines the amount of time the society can, out of its total labor time, spend on producing each special commodity" ("Das Kapital" Vol 1, p 96 [Chinese edition]). A socialist society must, "within the general labor time of the society," "use only the necessary proportion on various kinds of commodities" ("Das Kapital" Vol 3, p 716 [Chinese edition]), so as to guarantee the planned proportionate development of socialist production and satisfy society's needs. This is exactly the sense which Marx meant when he wrote: "In the situation where the capitalist production style has been extinguished while the social production still exists, the determination of value will still have the control function in the following senses: the regulation of labor time and distribution of social labor among different kinds of production and, lastly, bookkeeping which is related to this will be a lot more important than at any time before" ("Das Kapital" Vol 3, p 963 [Chinese edition]). From this we can see not only that the law of value accepts the law of socialist fundamental economy and the law of planned proportionate development of the national economy; on the contrary, we can see that only through the use of the function of the law of value, can the requirements of those two laws be realized. Therefore, the planned management of socialism needs the conscious use of the law of value.

First of all, we should make use of the accounting function of the law of value as the objective basis for the planned and rational distribution of social labor. Under the socialist system, the society's distribution of social labor among each production department is mainly through the distribution of investment. The society, while distributing investment, has to take into account the consumption of social labor and the social labor taken to produce a certain product. Marx wrote that some departments, while continuously consuming the means of production and means of livelihood for a long time, do not supply any useful products while they continuously consume the means of production and means of livelihood. Therefore, society has to calculate in advance how to

avoid the damage that the overdevelopment of the former could do to the latter. For example, the development level of our country is relatively low, so in order to solve the food, clothing and consumption problems of 1 billion people, not only must most of the labor force be used in agricultural as well as light industry production, but a proper increase in the investment also has to be added to these departments so as to guarantee their faster development. After this, we can think about investment in heavy industry which needs more investment and takes a longer time to construct and profit from it. However, for a long time in the past, we placed undue emphasis on the development of heavy industry, especially on taking steel as the key link. As a result, agriculture and light industry were jammed; the proportion among agriculture, light industry and heavy industry went awry; the supply in the market and the improvement of people's living was affected; and the development of heavy industry was also hard to go on. In the end, paying a high price was inevitable to carry out adjustments.

Second, value or its transformation, the production price, should be made the pricing basis in order to compensate for each production department's labor consumption and the labor taken up. In a socialist society, the economic accounting system of enterprises has to be carried out in order to conserve the consumption of labor and the holding fund. The economic accounting system requires that enterprises balance their income and expenses and guarantee profits. Under our nation's current conditions, the profit of enterprises, except the part turned over to the state in the form of taxes as well as other forms, is kept by the enterprises as a fund for production and development, for welfare and for awards for staff workers, etc. This requires that the prices of products be based on their value and production costs Only thus can the enterprises afford to develop production after selling their products and compensating consumed social labor. This, in fact, is also a form of planned distribution of social labor. It differs from the state's pre-distribution of investment as follows: this kind of distribution is afterwards automatic and it adopts the form of equal-value compensation. In the past, we did not take into full account the requirements of the law of value when setting prices for various products. As a result, the prices did not have any scientific basis, nor did they have any timely adjustment in accordance with the changes in the labor productivity of each department and the changes in the product value and the production costs. Therefore, the prices of various products were made either abnormally too high or too low. Also the coordination of the development among various economic departments in the national economy was affected. Our country's mining industry is a clear example of this. According to information supplied by relevant units, in 1981 industry, transportation, merchandising and construction, etc. had an average return on capital of 9.3 percent, the industrial sector had an average return on capital of 14.7 percent but coal production's return on capital was under 1 percent, natural gas production had a loss of 6.7 percent, the return on capital investment in iron ore production was just 3.9 percent, in chemical ores, 2 percent and in non-ferrous metal ores just 5 percent. Tin mining ran at a loss, while the return on capital of other non-ferrous metal ores varied between 4 and 14 percent. Although the return on capital for some products cannot be considered low, some of these minerals such as copper, lead and zinc are tax free. Crude oil's return on capital is 37.5 percent, but except for the relatively high returns from Daqing and other oil fields with good natural resources and

circumstances, the return on other fields is not high. In 1981, they ran at a 17 percent loss. The reason is that the price level for mining industry products is too low, seriously hindering the development of the mining industry. The technology used in most mines is backward, the level of mechanization is low, working conditions are not safe and improvements in working and living conditions are not rapid. Unlike other sectors, the challenge the mining industry faces is in natural resources, and the mining conditions have a tendency to become more and more difficult, with mines becoming deeper and deeper and transportation becoming more and more difficult. The decline in capital with large-scale production is slow and even increases sometimes, while timely adjustments to prices have not yet been made. For example, for our country's production of copper, lead and zinc, making up 95 percent of its production of non-ferrous metals, most of the prices were set down in the 1950's. They have not been adjusted for 20 years. For some years, the mining industry has been a case of demand over supply. The country has launched the call "Hurl yourself into the battle for mining production" with no great result. On the contrary, some processed industrial goods are cases of supply over demand, and the country wants to limit their production but is unable to do so. One of the reasons for this is that the prices of mining industry products are too low while those of some processed industrial goods are too high. This situation certainly influences the division of labor in the mining and processing industries as well as the coordinated development of the two large sectors.

Finally, we must consciously use pricing and value or deviations from the price of production to influence (promote or restrict) the production and consumption of certain products. When production is concerned, the prices should be set higher for products which need to be developed and lower for those which have to be limited. For consumption, higher prices have a restrictive effect, while lower prices encourage consumption. As for which products should adopt a high-price policy and which products a low-price policy, it depends on the state's planned arrangement according to the practical reality of different times.

In summing up, making adjustments in the rational division of social investment in a socialist country and the rational reward of each productive sector's labor consumption and labor taken up as well as social production and consumption (supply and demand) requires consciously using the law of value. Using the law of value in planned management is not limited to the market regulation part but includes mandatory and non-mandatory plans.

This involves a controversial question: Should the pricing policy of a socialist economy be based on the principle that prices conform to value or production costs or on the principle that prices deviate from value or production costs? This is a view popular both at home and abroad, which holds that if there is no deviation between value and price there is no pricing policy. Some comrades say that as supply and demand often do not coincide, conformity of prices with value or production cost is occasional and deviations are normal. Therefore, requiring that our pricing policy makes prices conform to value or production cost is not practical. I believe this point is worth discussing. As was said above, in a socialist system the major role of the law of value is to calculate social labor consumption and social labor taken up so that the planned division of social labor and services among various

production departments can be done rationally. Starting from this requirement, every product's price must as closely as possible match its value or production cost. If the prices of different kinds of products are abnormally high or low, they cannot correctly reflect the true situation of each production department's labor consumption and labor taken up, and can only reflect in a twisted manner, as some comrades put it, an image in a distorting mirror. This sort of pricing system is no help to the rational division of social labor among different production departments, and can even work against it. Of course, under socialist conditions, making prices conform completely to value or production cost is impossible. This is not only because of the backwardness of calculating techniques which makes the precise calculation of labor consumption in the millions, and tens of millions of different varieties, and different standards of products very hard, but also because there are conflicts of interest between departments and enterprises. As a result, it is difficult to gather accurate information on the actual consumption of labor in production. Even for the calculation of capital itself, we still have not discovered an accurate calculating method, and can only do it approximately. But this is no reason for giving up the principle that price should conform to value or production cost. Although the two cannot completely coincide, we must eliminate unreasonable deviations, working hard to bring them closer and closer together. At the same time, we must not deny that there are some cases in which we should consciously make them differ to a certain extent. This deviation either is caused by a temporary but serious disharmony between supply and demand or is necessary to the adjustment of the structures of production and consumption. In a planned socialist economy, the former should not become a common occurrence, and the latter should be taken care of through direct planning. The price lever should be used only as a subsidiary method. In every situation strict attention must be paid to the extent of these deviations so that they do not become false images distorting the amount of social labor used in making products and thus create conditions that will gradually reduce and finally eliminate the deviation. In all, the conformity of prices to value or production cost should become the goal of our pricing policy and, on the basis of this, adjust the irrational pricing system. Because of the irrationality of the pricing system left to us by history, adjusting it so that it becomes rational is a very difficult task. This is not only a very complicated and strenuous task which demands the assembly of a great deal of material and the problem of scientific methods of calculation, but the adjustment of prices also involves the national, collective and individual interests. Therefore, the adjustment of the pricing system must be taken very seriously, taking reliable measures. Only if we understand the theories very well and are clear about our direction, will concrete methods and steps be relatively easy to find.

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CHINA DAILY ARTICLE ON ZHANJIANG ECONOMIC ZONES

HK220051 Beijing CHINA DAILY in English 22 May 84 p 2

[Article by "our staff reporter" He Qide: "Zhanjiang Economic Zones Set"]

[Text] Zhanjiang--This city in the far south of China, one of 14 coastal cities that the government has decided to open further to the outside world, is planning to set up several economic development zones.

Subject to approval by the government, zones will be established on Donghai, which is under the city's administrative control, and in the Chi-Xia area between the two urban districts of Chikan and Xiashan.

To attract foreign, Hong Kong, and Macao capital, as well as cooperation of domestic enterprises, terms will be given that are even better than in China's four special economic zones, Wen Ge, the city's party secretary, told CHINA DAILY.

Donghai Island, China's fourth in size after Taiwan, Hainan, and Chongming, is being considered as a possible centre for oil refining, petrochemistry and shipbuilding.

Connected with the mainland by a 6.7-kilometre causeway, the 286-square-kilometre island has 73 kilometres of coast with many potential deep water harbours. One could take a dock for 30,000-ton ships and another for 10,000-ton ships, Wen said. They could handle more than 100 million tons of cargo a year. The island provides the nearest port on the mainland to South Asia, Oceania, and countries along the coast of the Indian Ocean. The Island, being flat, is suitable for large or medium-size airports, Wen said. It is ideal for heavy and light industries because its foundation is igneous rock, scientists say.

The present Zhanjiang Port is one of China's eight biggest seaports and handles up to 11.4 million tons of cargo a year. Oil refining would be logical here, for it is on the South China Sea with estimated oil deposits of 800 million to one billion tons.

With a 12-Kilomtre long forest zone and a long stretch of white sand on its east shore, the island is believed to have good prospects for building the tourist industry.

The 14-square-kilometre Chi Xia area is expected to be built up in the immediate future into a base of modern medium-sized and small industries requiring high technology.

The area will focus on food, textiles, building materials, and electronics, the party secretary said.

Construction of an eight-kilometre highway across the area, for which the municipal government has allocated about 10 million yuan, is scheduled to begin in July. It will be the first project involved in opening up of the area, Wen said.

Wen disclosed that some foreign companies have discussed cooperation in developing Donghai Island. Zhanjiang, which is in Guangdong Province about 500 kilometres southwest of Guangzhou, has an administrative area of more than 10,000 square kilometres and a population of more than 4.6 million.

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FOREIGN TRADE AND INVESTMENT

CANADIAN LEGISLATOR FAVORS INVESTMENT IN PRC

OW110806 Beijing XINHUA in English 0704 GMT 11 May 84

[Text] Ottawa, 10 May (XINHUA correspondent Gu Yaoming)--Speaker of the House of Commons of Canada Lloyd Francis has praised China's policy of opening to the outside world and pledged to encourage Canadian businessmen to bring their investments and technology to China.

In an exclusive interview with XINHUA here yesterday, Francis who just paid a visit to China said the parliamentary delegation led by him was deeply impressed by the new policy, the policy of opening to the outside world, adopted by the Chinese Government. He said after they saw enormous construction in Shenzhen and witnessed what great changes have taken place in the last 4 years there, the delegation believed that "there's no question the new policy has impacted Shenzhen."

The speaker pointed out that the Chinese administration is very sincere about the foreign investment in China and is willing to guarantee the investments for people coming at the point. "We will tell people of Canada, tell our businessmen, tell our investors that China is inviting foreign capital and will guarantee the terms of investment of foreign capital," he said. He said Canada and China have very good relations. He expressed the belief that the two countries could work cooperatively in offshore oil drilling, petroleum industry, coal mining industry, power transmission and generators, electronics and high-technology.

The speaker also praised Chinese Government policy towards Hong Kong, saying that "it is a very realistic policy."

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RONG YIREN ON FOREIGN VENTURES, HONG KONG ISSUE

OW221055 Beijing XINHUA in English 0944 GMT 22 May 84

[Text] Beijing, 22 May (XINHUA)--Foreign businesses investing in China will certainly make profit so long as they abide by China's laws, Rong Yiren, chairman of the China International Trust and Investment Cooperation (CITIC), said here today.

This is because China's open policy is based on the principle of equality and mutual benefit, Rong said at a meeting with journalists from Hong Kong and Macao, who are covering the current sessions of the Chinese people's political consultative conference and the national people's congress.

He said that China had made great progress in economic exchange and technological cooperation with overseas firms as well as those in Hong Kong and Macao. An increasing number of overseas businesses had indicated their readiness to start joint ventures with China since the latter half of 1983, he added.

"This kind of exchange and cooperation will continue to expand and the prospects are very promising," the CITIC chairman stated.

Cooperation with foreign enterprises was first confined to compensation trade, processing supplied materials and assembling supplied parts, Rong Yiren recalled.

Now they covered joint ventures using Chinese and foreign investment, co-production and enterprises established exclusively with foreign investment.

Chinese corporations were now cooperating with foreign businesses and those in Hong Kong and Macao in investment, technology and management, he said. This helped strengthen interflow in technology and personnel and promote mutual understanding while raising the technological and managerial standards of Chinese enterprises and thus contributing to China's modernization drive, he added.

Rong said that overseas business people really did not have to worry about the lack of necessary laws in China.

A law on joint ventures using Chinese and foreign investment and a patent law and several other legal codes had been promulgated and China would assimilate

good experience from abroad in light of its specific conditions and adopt active and careful measures to improve its legal system step by step, the business leader said.

"Some issues agreed upon by both parties through consultation can be written into the contract with legal binding force in the absence of relevant legal codes," he said by way of explanation.

Asked about the future economic development in Hong Kong, Rong Yiren said that Premier Zhao Ziyang had made explicit statement with regard to its stability and prosperity.

"It is our hope that Hong Kong will retain its characteristics as a banking and trading center and go on playing a part in introducing foreign funds and technology," Rong said.

He said CITIC had set up a branch in Hong Kong to keep close contact with business circles there.

Asked if China would increase its investment in Hong Kong, Rong said Hong Kong's affairs should be handled by the local people themselves and funds from the mainland could only play a supplementary role.

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SHANGHAI TO SPEED OPENING UP TO FOREIGN FIRMS

OW191449 Beijing XINHUA in English 1418 GMT 19 May 84

[Text] Beijing, 19 May (XINHUA)--Shanghai Mayor Wang Daohan declared here today that China's biggest industrial city will be geared to the Pacific region, make better use of foreign funds and increase international cooperation.

The city's economic departments will be further integrated with the international markets and with what is most advanced in other countries.

These are the essential points of a long-term policy guiding Shanghai's economic and social development, Wang Daohan said in a panel discussion of national people's congress deputies here this afternoon.

Shanghai, he said, has established trade and economic ties with more than 140 countries and regions. There are a dozen joint ventures using Chinese and foreign investment in the city.

The mayor disclosed that Shanghai will use foreign funds to speed up the revamping of its old enterprises. The city's industrial, commercial, urban construction and communications trades and key enterprises are to establish regular links with a similar foreign enterprise advanced in technology and management for close cooperation and the import of technology.

Shanghai, he said, has decided to tackle the micro-electronics industry with concentrated effort, develop optical fiber telecommunications, laser and bioengineering, and apply these technologies to the food and pharmaceutical industries and environment engineering.

The city will open two zones--Minhang and Hongqiao--as centers of foreign investment and operation, and set up a "science park" for academic and technical exchanges between Chinese and foreign specialists and scholars.

A dozen hotels are to be added along with three trade centers, the mayor noted.

Apart from the wharves, a railway station, airport and tunnel being undertaken, the city government is also considering the construction of a subway, expressway and modern telecommunications projects.

Wang Daohan said that China's achievements in foreign affairs have created very favorable conditions for the implementation of the open policy. Shanghai should be geared to the Pacific region, actively develop its ties with the countries and regions on the shores of the pacific and strengthen economic cooperation and trade with them.

The city will offer preferential treatment to foreign partners with regard to taxes, land fees and remittance of foreign exchange, he added.

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OVERVIEW OF FUJIAN INVESTMENT COMPANY ACTIVITY

Hebei JINGJIXUE ZHOUBAO [ECONOMIC WEEKLY] in Chinese 27 Feb 84 p 1

[Article by Yan Zheng [0917 2973]: "Raising Foreign Funds. Introducing Technology. Transforming Enterprises: Fujian Investment Enterprise Company Actively Develops Foreign Economic Activity"]

[Text] In its fund raising, Fujian Investment Enterprise Company [FIEC], which engages exclususvely in foreign economic activity for Fujian Province, has for the past 5 years utilized foreign Chinese funds and foreign funds in general and has introduced advanced foreign technology and equipment. The company has made notable accomplishments in the areas of transforming old enterprises and developing new commodities, thereby making contributions to the construction of the Fujian provincial economy.

Raising Foreign Funds and Developing International Financial Activity

Altogether, the FIEC has signed joint venture agreements with 22 American, Japanese, West European and Hong Kong banking and stock companies. It has obtained more than U.S.$30 million in commercial loans from two American banks and, from four American, Japanese and Hong Kong banks, obtained more than U.S.$30 million in short-term foreign exchange loans using an overdraft method. In August 1983 this company successfully issued 5 billion yen worth of bonds in Tokyo for a term of 10 years and a yearly interest rate of 8.5 percent. This was the first time that a Chinese locality, province or city had issued bonds internationally to raise foreign funds. In addition, the company also raised a large investment from overseas Chinese and Hong and Macao to provide funds for the construction of the Fujian economy. In 1981 the company began running trust and trade ventures and over the past 3 years has had a net profit of more than 50 million yuan.

Introduction of New Technology, Development of New Commodities and Transformation of Old Enterprises

Over the past few years 164 projects for the introduction of technology have been accomplished, enabling the replacement of a large quantity of factory equipment and for commodity exchange, improvement of the quality of enterprises and improvement of economic results. Some older enterprises that had been about to go bankrupt developed new commodities with the introduction of new technology and quickly turned their deficit situation around.

When introducing new technology, the orderly, progressive methods adopted by the investment enterprise company can be roughly divided into the following steps: (1) When importing foreign machinery and foreign products, it investigated the economic and technological feasiblity of their introduction; (2) it chose a portion of goods from among them, importing small quantities of complete machines for test selling on the internal market and for predicting the market; (3) for those products with a bright marketing future, whole sets of component parts were imported along with assembly technology and batch assembly-production begun. (4) under the prerequisite of assuring quality, it diligently increased production of Chinese component parts, introducing key equipment and test instrumentation to organize the copying of components; (5) on the basis of what has been described above, new production lines and large-volume production were introduced, and the company strove for export sales while marketing internally.

Establishing Large- and Medium-scale Key Industrial Projects for Investment

Fujian's industrial base is deficient and its technology backward, and basic energy resources and communications facilities urgently await construction. The investment enterprise company utilizes the funds that have been raised to invest in the establishment of large- and medium-scale key industrial projects, for example, Xiamen International Airport, the Xiamen East Ferry [Dong-du] dock facilities, Fuxhou Xiamen Cheng Kong [program controlled?] Telephone and two Fuzhou Xiamen steamship companies. The investment enterprise company assists relevant departments in the province to undertake feasability studies and oversee the work of project examination and approval; selectively participates in a portion of the investment; assists in organizing joint Chinese-foreign management, cooperative production and compensatory trade; and in a planned fashion links up the construction of large- and medium-scale projects with foreign financial groups and companies with funds, credit as well as control of advanced technology. It also pays special attention to making use of the enthusiasm overseas Chinese have for building in their old homeland. For large-scale projects, the company also strives to obtain long-term, low-interest loans from international financial organizations through foreign governments and the World Bank. It provides excellent conditions for the construction of key projects in Fujian.

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FOREIGN TRADE AND INVESTMENT

BRIEFS

CHONGQING TRADE-TOURIST CENTER--Chongqing, 23 May (XINHUA)--Chongqing, the largest industrial center in southwest China, plans to import 100 pieces of equipment and technology in 1984, valued at over 100 million U.S. dollars. This was disclosed by Xiao Yang, vice-mayor of this municipality in Sichuan Province, while receiving diplomatic envoys from 33 countries to China on their study tour of Chongqing last week. The imported items will cover machine-building, meters, electronics, metallurgy, chemicals, pharmaceuticals, plastics, textiles, foods, packing, household electric appliances and construction materials. Chongqing, with a population of 13.7 million, is one of several big cities that have undergone an administrative shakeup bringing surrounding counties under their jurisdiction. It is empowered to negotiate and sign contracts with foreign firms since management reforms last year. The city now trades 170 commodities with 38 countries and regions. To facilitate the growth of foreign trade, Chongqing will set up a permanent office in Hong Kong, according to an official of the municipal Foreign Trade Department. It also plans to build an international trade center and tourist building. [Text] [OW231633 Beijing XINHUA in English 1433 GMT 23 May 84]

JOINT INVESTMENT CORPORATION--Nanchang, 23 May (XINHUA)--Jiangxi Province set up its first joint investment corporation, with a Hong Kong firm, early this week. The Honghai Electronic Company Ltd is a joint venture between B. H. C. International Trading Ltd of Hong Kong, Jiangxi's Electronic Products Import and Export Corporation and the Sanghai Electric Appliance Plant. It will produce cassette video tapes and household electric appliances, develop and apply computer technology and repair electric and electronic instruments imported from abroad. Ni Xiance, deputy governor of Jiangxi, attended the inaugural ceremony. [Text] [OW231611 Beijing XINHUA in English 1437 GMT 23 May 84]

FOREIGN COOPERATION INVITED--Wuhan, 24 May (XINHUA)--Hubei Province has more than 100 projects inviting economic and technological cooperation from foreign countries. Negotiations on these will be conducted in June. This was mentioned here Wednesday by Governor Hunag Zhizhen at the banquet given by Hubei People's Government for diplomats from 32 countries visiting the province from 20-24 May. Accompanied by Lei Renmin, advisor to the Chinese Ministry of Foreign Economic Relations and Trade, the diplomats visited Gezhouba Dam, steel-rolling and textile mills, art pottery, steam-turbo generators factories and scenic spots in the province. The diplomats discussed business on pre-arranged trade items and made preliminary contact with local departments concerned. [Text] [OW241700 Beijing XINHUA in English 1601 GMT 24 May 84]

FAIR IN ETHIOPIA--Addis Ababa, 28 May (XINHUA)--A Chinese export commodities exhibition which opened on 9 May at the Trade Fair Centre here came to a successful end today. In its 20 day exhibition, 50,000 people visited the exhibition. Among the exhibits small farm machinery, textiles and arts and crafts are most attractive to the visitors. Ethiopian Minister of Foreign Trade Wollie Chekol cut the ribbon at the opening ceremony of the exhibition. Minister of Foreign Affairs Goshu Wolde, Minister of Trade Abebe Kebeke, Minister of Mines and Energy Tekeze-Shoa Aytenfiso and other high ranking government officials of Ethiopia visited the exhibition. [Text] [OW290040 Beijing XINHUA in English 0033 GMT 29 May 84]

FRIENDLY TIES WITH JAPAN'S TOYAMA--Tokyo, 9 May (XINHUA)--A ceremony was held in Toyama City today for China's Liaoning Province and Japan's Toyama Prefecture to forge official friendly ties. A protocol in this regard was signed by Quan Shuren, head of a Liaoning Province Friendship Delegation and governor of the Liaoning Province, and Yutaka Nakaoki, governor of the Toyama Prefecture. The two sides expressed common desires to further develop cooperation in economy, trade, science, technology, culture and education. A message of congratulations from Japanese Prime Minister Yasuhiro Nakasone was read out at the ceremony. In the message, the prime minister expressed the hope that the two places will continue to develop their cooperation and contribute to the friendly and cooperative ties between the two governments and the two peoples. Japanese Foreign Minister Shintaro Abe also sent a message of greetings to the meeting. Attending the signing ceremony were all the members of the Liaoning Province delegation, over 60 people from all walks of life in the Toyama Prefecture, and Chinese Ambassador to Japan Ding Min. [Text] [OW100117 Beijing XINHUA in English 1604 GMT 9 May 84]

CSO: 4020/128

QUIZ ANSWERS SPOTLIGHT RAILWAY HISTORY, DEVELOPMENT

Beijing TIEDAO ZHISHI [RAILWAY KNOWLEDGE] in Chinese No 2, 28 Mar 84 pp 45-48

[Excerpts from article: "Answers to "Comprehensive Quiz" Contest On Railroad Knowledge'; Jointly Conducted by the All-China Railroad Federation of Trade Unions, the All-China Railroad Society and the Editorial Department of 'Railway Knowledge'"]

[Excerpts] (1) In September 1922, after Comrade Mao Zedong personally led the great Yue-Han railroad workers strike and achieved victory, on November 1 he established the Yue-Han Railroad Federation of Trade Unions.

(2) The Great Jing-Han Railroad Workers Strike, which shocked the country and the whole world, occurred on 4 February 1923. Due to the armed supression dished out by the warlord Wu Peifu, the February 7 Massacre took place.

(3) The first time that China's railroad workers participated in the celebration of International Labor Day on May 1 was in Harbin in 1907.

(4) The All-China Railroad Federation of Trade Unions was established in Beijing in 1924. Four national congresses convened before liberation. The Eighth National Congress convened in 1978.

(5) The All-China Railroad Federation of Trade Unions, the Seaman's Trade Union, the Han Yepin Federation of Trade Unions and the Guangzhou Workers Federation of Trade Unions on 1 May 1925 in Guanzhou joined together and launched the Second National Workers Convention and proclaimed the founding of the All-China Federation of Trade Unions.

(6) During the War of Resistance Against Japan, under the circumstances of border regions being severely troubled economically, Shanxi, Gansu and Ningxia in 1942 launched the famous Zhao Zhanzhen Movement. Zhao Zhanzhen is the Railroad Worker who rushed to Yanan on the Tongpu road.

(8) In the early period of the People's Republic, the railroad workers displayed the spirit of heros, and in 1952 on a grand and spectacular scale initiated the movement for capacity loads, overweight haulage and 500 kilometers. This had a positive effect on promoting the development of railroad transportation.

(9) "We must still strengthen centralized unity as a method for solving railroad problems." This is what Deng Xiaoping stated in "Talks on the Overall Party Situation; Organize the National Economy."

(10) At the 1983 National Railroad Work Conference, the main substance and demands of Lu Feng [6424 7364] was the 16 character policy of "strictness first, iron discipline, unified cooperation and superior service."

(11) Since 1949, we have convened six national railroad model-workers conferences. The most recent one was held in Beijing on 1 November 1982; 488 model workers and 355 advanced groups were selected from the entire railroad system.

(12) The railroad engines named after revolutionary leaders are the "Mao Zedong", the "Zhou Enlai" and the "Zhu De". They were so named in 1946, 1978 and 1946 respectively. Currently they belong to the Fengtai maintenance section of the Beijing Office, the Shanghai maintenance section of the Shanghai Office and the Harbin maintenance section of the Harbin Office.

(13) The logo that we currently wear was designed by Comrade Chen Yuchang [7115 3768 2512]. The partial circle over a rail cross-section represents the front of a locomotive, the partial circle represents the people and the rail section represents the railroad. The entire meaning is the railroad of the people.

(15) The predecessor of the Ministry of Railroads of the PRC is the Chinese Revolutionary Military Commission Railroad Department. The predecessor of the railways corps is the PLA railway engineering corps. On 1 October 1983, the railway corps was incorporated into the Ministry of Railways, and altogether there are nearly 3 million workers.

(16) The legally established special judicial organization that the railroad system depends on is the railroad transportation court and the railroad transportation procuratorate. They are established on the three levels of the Ministry of Railways, railroad offices and branch railroad offices, respectively. They formally handled cases starting on 1 May 1982.

(17) Since the founding of the People's Republic, the total length of China's newly built railways has exceeded 28,000 kilometers, and currently there are more than 50,000 operable kilometers of railways. This was announced at a 29 September 1983 press conference by a spokesman for the Ministry of Railways.

(18) The railroad system has nine of the nation's 70 large and medium-sized key construction projects. Of these, five are electric railway projects.

(19) China's northern-most railway station is Xiliji of the Harbin Office. The station that is farthest south is Sanyazhan of the Guangzhou Office. Dongfanghong of the Harbin Office is the station that is farthest east and Junerliexi of the Urumqi Office is farthest west.

(20) The Beijing to Shaanxi railroad is the first double track electric railway built in China. The State Council required that it be opened in 1984. Through the joint efforts of a large contingent of railway builders within and outside the railroad, it was opened ahead of schedule on 20 December 1983.

(21) In 1983, the leading party group of the Ministry of Railways brought up for the entire railroad the demands of "the three raises, the one decline and the two halts." The three raises are to raise production, economic results and quality. Accidents must drop. The two halts are to halt uncivilized loading and unloading and rude treatment of passengers.

(22) Currently, the railroad has 15 railroad offices, 19 construction offices, 4 survey and design institutes and 67 subordinate industrial enterprises (n.b., this has recently been revised to 58).

(23) At the Sixth National Quality Month Awards Ceremony, railroads won gold medals for the Hanjiang steel suspension thin-wall hollow box-design bridge and a silver medal for the Pingshiche Station switchyard extension project and the Zhuozhanghe Bridge. The Chengdu locomotive plant was awarded the national quality management award.

(27) In 1984 China commenced construction on the Datong to Qinhuangdao Railroad - the first line to use heavy haulage electric locomotives. One heavy haulage train can transport 6,000 to 10,000 tons of freight.

(28) China is using 34 types of passenger cars, 16 types of freight cars, 6 types of steam locomotives, ten types of diesel locomotives and 3 types of electric locomotives.

(37) The construction of the Gengxi electric maintenance section which is listed as one of China's key construction projects has already started. After it is completed, it will be China's largest electric maintenance section and it will have a repair capacity of approximately 150 trains per annum.

(38) Of the review outlines and study booklists of the factory managers and heads of state-run enterprises, there are 3 edition and 38 volumes regarding basic knowledge for railroad transportation enterprise management. The study booklists are "The Railroad Transportation Economy," "Railroad Transportation Work Organization" and "The Production, Administration and Management of Industrial Enterprises."

(39) The mass organization of the railroad's amateur and special literary and art workers was established in 1983 and is called the National Association of Railroad Literary and Art Workers. The mass organization of the railroad's athletic workers was founded in 1952 and is called The China Locomotive Athletic Association.

(41) The first operable railroad to appear on Chinese soil was the Wu-Song Railroad. This railroad started operating in 1876 and within a year had transported more than 160,000 passengers.

(42) The Tang-Xu railroad built in 1881 is China's oldest surviving railroad. This railroad used 1435 millimeter gauge track which weighed 27 kilograms per meter.

(43) China's outstanding engineer Zhan Tianyou [6124 1131 0147] directed construction of the Jing-Zhang railroad. Construction started in 1905 and ended in 1909. This engineer chose a 3.3 grade slope for hills and gullies and designed the famous "zigzag course" plan for the Qinglong Bridge. He fell ill and died in 1919.

(44) According to statistics from July 1981, Taiwan Province has a total of 3,297 km of railways. Approximately two-thirds is for special purposes, and 1,091 km of railway is managed by the Taiwan Railroad Office, and it has a gauge of 1,067 millimeters. Taiwan's railways circle the perimeter of the island and there are no railways in the mountainous central regions.

(45) China's boundaries which connect with the railroads of neighboring countries are: Manzhouli on the Bin-Zhou line, Suifenhe on the Bin-Sui line, Tumen on the Mu-Tu (Chang-Tu) line, Ji'an on the Mei-Ji line, Dandong on the Shen-Dan line, Erlian on the Ji-Er line, Pingxiang on the Hu-Gua line and Shanyao (or Hekou) on the Hun-He line.

(48) China's first railroad tunnel was built in 1889. It is located on the Taibei to Jilong line in Taiwan and is 241.4 meters long.

After 1949, China built more than 50 tunnels longer than 3 kilometers. The longest operable tunnel is the Yimaling tunnel on the Jing-Yuan line: it is 7,023 meters in length. The Dayaoshan double-track tunnel which is under construction on the Heng-Guang line is 14.3 km long and will become China's first double-track tunnel.

(52) China's first special railroad organization was the Kaiping Railroad Company. It was established in 1885 and its initial funds were 150,000 liang of silver.

(53) Beijing's first railroad was the Jin-Lu Railroad. This railroad ran from Tianjin to Luguoqiao, and a feeder railway was built to Majiabao. It was completed and officially opened in 1897.

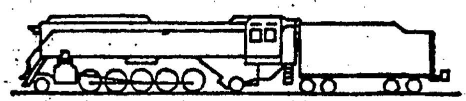
(55) The meaning of the word "train" is many cars joined together, with an engine pulling and a train outfitted with the train symbol and attendants. Trains, according to the nature of the transportation and the uses, fall into such categories as passenger trains, freight trains, mixed trains, special trains and repair/work trains.

(56) Train stations according to different technical work can be classified as midway stations, regional stations and marshalling stations. According to the different nature of business they can also be classified as passenger stations, freight stations and passenger-freight stations. According to the amount of burden being borne and the political and economic status, they can be put into six categories.

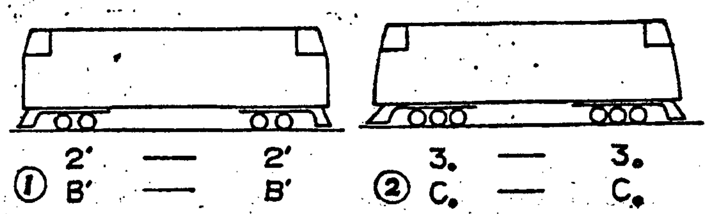
(57) The numbering of passenger trains is: express trains (1-98), direct (101-298), guannei [intra-bureau?] express (301-398), direct passenger (401-498), guannei [intra-bureau?] passenger (501-598), provisional passenger (601-678), mixed train (681-698), commuter train (701-748) and tourist train (tourist 1-tourist 48).

(58) The product of the railroad transportation industry is the movement of passengers and freight. In order to show the volume of railroad product, we use the two indications of the volume of passenger turnover and volume of freight turnover. Their units of measure are passenger-kilometers and ton-kilometers.

(59) The drawing below is a diagram of the "Qianjin" model steam locomotive produced in China. It has two pilot wheels, ten driving wheels, 2 following wheels and arabic serial numerals. Its axel is 1 - 5- 1, and this type of locomotive has 2,980 horsepower.

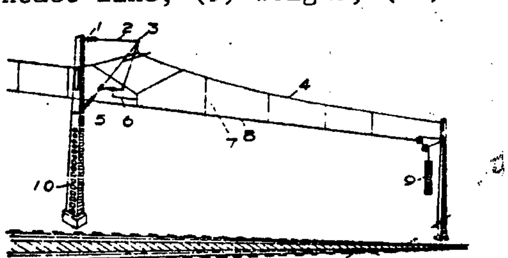


(60) Modern high-horsepower diesel locomotives have two forms of transmission; they use electric gearing or hydraulic gearing. In the diagrams below of two diesel locomotives, from its axel we can tell that drawing (1) is a hydraulic driven locomotive and drawing (2) is an electric-driven locomotive.



(62) The electricity for electric railways is transmitted from power stations, and after passing through a transformer station the electricity is transformed into electric current that is suitable for electric locomotives. The electricity travels on a conducting wire along the railway and it enters the locomotive's pentograph. It is supplied to the traction motor affixed beneath the locomotive, it compells the locomotive's wheels to revolve thus making the engine move.

(63) The drawing below is a diagram of the electric railway contact wire. The following names correspond to the numbers. (1) insulator; (2) tension link; (3) wrist bracket; (4) cable; (5) insulator; (6) positioner; (7) suspenders; (8) contact line; (9) weight; (10) mainstay.



(63) 铁路车辆全长指车辆两端……面间距

(63) The length of a car is the distance between inner surface of the coupling tongues at each end and is measured in meters. The (changing length?) of a car is the car's total length divided by 11 meters. The axel weight of a car is the proportion of the total weight to the number of axels: that is the weight that each pair of wheels (axel) brings to bear on the rail, using tons as the unit of measure.

(64) In 1979 China developed the Model D45 32 axel qianjia-style (scissors?) long freight car. This type of car is 62.2 meters long and has a carrying capacity of 350 tons.

(65) In order to improve the transport capability of freight cars, China has drawn up "A Complete Technical Research Plan for Heavy-Haulage Railroad Cars," and this has been listed as one of the nation's key scientific and technical research projects. This type of research has already achieved great success. In October 1983 on the Beijing circular test railroad track, we carried out an experiment pulling 122 cars hauling 10,082 tons and achieved great success.

(67) The Nan-Fu railroad starting at Tuluxiang Station on the Lan-Xin Line in the north to Ku'erle of the Talimu Basin in the south, stretches across the Tianshan Mountains a total of 476 miles and was triumphantly opened on 20 October 1981.

(68) The Wan-Gan railroad starts at Wuhushi Station of Anhui Province in the north and stretches 551 kilometers south to Guixi of Jiangxi Province. Construction was started section by section in 1967 and was basically completed at the end of 1981.

(69) Construction of the Yan-Shi railroad is being speeded up. It starts at the Yanzhoudongtan Station on the Jin-Pu line and continues east 307.8 km to the port of Shijiusuo. Construction of this railroad will be completed by 1985 and it will become a major line that runs parallel to the eastern stretches of the Jiao-Ji line and Long-Hai line.

(70) The railroad with the most tunnels is the Cheng-Hun railroad. It is 1,100 km long and has 427 tunnels that altogether are 341 km long or 31.4 percent of the total. The railroad with the second highest number of tunnels is the Xiang-Yu railroad with 405 tunnels totalling 287 km, or 34.8 percent of its total length of 824 km.

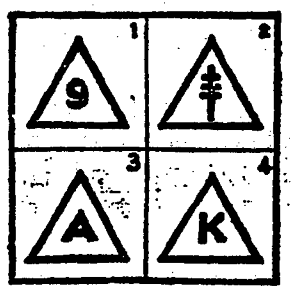
(71) China's local railroads began to develop in the 1960s and currently in all provinces and autonomous regions nearly 6,000 km of all types of light railways have been built. Of these, excluding a portion of standard gauge railroads that have been transferred to the Ministry of Railways to be managed, more than 4,000 km of railways are still managed by the local transportation departments of more than ten provinces and autonomous regions. Henan Province has the greatest amount with 1,500 km of local railways.

(72) China mainly uses a total of 36 forest railroads to transport lumber. There are a total of 11,000 km of lines and they are all narrow-gauge

railways with a 762 millimeter gauge. The forest railways are mostly in the northeast, and Heilongjiang Province has the greatest number with 18.

(73) The first bridge built across the Chang Jiang was the Wuhan Chang Jiang Bridge with a total length of 1670.4 meters. The longest bridge on the Chang Jiang is the Nanjing Chang Jiang Bridge; its railroad bridge is 6772 meters long and its highway is 4589 meters long. On the Zhicheng Chang Jiang Bridge, the railway and highway are on the same surface.

(81) What the numbers or symbols inside the triangles indicate can often be seen on waybills, freight tickets and other freight receipts indicating the sequence of marshalling trains. (1) indicates livestock or fish for foreign trade export; (2) indicates a pesticide train with DDVV, 666, 1605 and 1059; (3) indicates key foreign national goods with a police escort; and (4) indicates perishable produce.

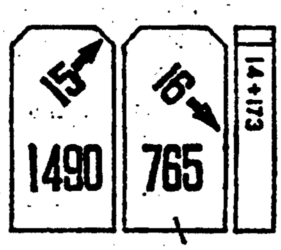


(82) Light fiber communications is taking the electric signal for transmitting messages, and by means of a light source, transforming it into a light signal, and transmitting it through a light fiber. China's first light fiber communications line was 12 km from the Beijing train station to Muxidi.

(83) China's communications network uses wire communications primarily and wireless communications secondarily. Open line poles and underground cables are used for transmission lines, and microwave and light lines are also used.

(84) Railroad signal equipment is categorized as signal, interlocking and block equipment. Signal installation is usually broken down into the two categories of signal machinery and signal indication equipment. Interlocking equipment is broken down into electric central interlocking and electric interlocking machinery interlocking. Blocking equipment is broken down into automatic, semi-automatic and key blocking.

(85) This drawing is the railroad's gradiant chart, and is positioned on the verticle stretch of track before the point of slope. The upward slanting arrow indicates an upward slope and the downward pointing arrow indicates a downwards slope. The number preceeding the arrow indicates the gradient (per mile), the number below indicates the length of the slope and the side number indicates the point at which the slope changes.



(86) China's first electric railway is the Baoji to Fengzhou stretch of the Bao-Cheng line which was opened on 15 August 1961. This line was completely electric on 1 July 1975.

(87) Hump switching is a type of switch equipment that uses the gravity of the train and the potential energy (altitude) of the hump and assists the thrust of the engine to disassemble a train. Based on the different conditions of the equipment, they can be classified as: (1) simple humps; (2) non-mechanical humps; (3) mechanical humps; and (4) automatic humps. The main marshalling yards of China's railroads have more than 80 humps.

(88) Railroad "Technical Specifications" stipulate that the seams connecting the rail under maximum temperatures must not be lower than 0. Structural cracks are calculated by multiplying the coefficient of the expansion of the track by 0.0118 for the rail's temperature difference in degrees T (highest) - t (lowest), again multiply by the length of the rail and then subtract C (the resistance of the connection and the base of the rail restricts the amount of the rail's flexibility). (n.b. corrections have been made to the original question; no points off.)

(89) China's first steel suspension bridge was opened on 28 December 1982 in Ankang of Shanxi Province. This bridge is 305.1 meters long and has 192 meter spans (56 + 192 + 56), and is currently listed as the world's number one bridge of this type.

(91) The transport of coal is a major task of China's railroad transportation. Currently there are a total of six railroads for transporting coal, i.e.; the Beijing to Baotou line, Beijing to Yuanping, Taiyuan to Jiaozuo, Shijiazhuang to Taiyuan, Handan to Changzhi and the Nanbei Tongpu line. There are plans to build three new railroad lines for the transport of coal, namely, the Datong to Qinhuangdao, Shouxian to Shijiazhuang and Houmabei to Yueshan lines.

(92) There are more than 600 km of railways connecting China's five major open-pit mines at Huolinhe, Yiminhe, Yuanbaoshan, Zhunge'er and Pingshuo. Of these, the longest railway is the Tong-Huo railroad which connects the Huolinhe mine area and the Tongliao Power Plant.

(93) The first railway built after the founding of the People's Republic was the Cheng-Yu Railroad opened on 1 July 1952. This railroad is 505 km long, has 63 stops and is currently being transformed to an electric railway.

(94) China's passenger train that travels the longest route is the No. 52/53 express train from Shanghai to Urumqi, covering a total distance of 4,079 km.

(95) China's only railway which uses wind power is the "100 mile wind region" Xiaocaohu Station between Hongceng and Jinshui on the Lan-Xin line. The wind-driven generator produces 2,000 watts of power.

(96) The world's longest stone arch railway bridge is China's "a slice of sky" (empty stomach?) style stone arch bridge without reamers on the Cheng-Kun railroad. It crosses the Dadu River and is 63.2 meters long and 26 meters high.

(97) The tunnel at the highest elevation is the Guangjiao tunnel between Guangjiao and Nanshan Stations on the Qing-Zang railroad. It is 4,010 meters long, and the track at the highest elevation in the tunnel is 3,700 meters above sea level.

(98) The stowage area for articles carried on by passengers is below the seats or on the luggage rack. Both sides of each YZ-22 [Ying Zuo=hardseats] style passenger car has luggage racks, and 11.7 square meters can be used on each rack. Each passenger train has 17.563 cubic meters of rack space, which calculated according to 118 passengers per train, comes out to 0.15 cubic meters maximum area per person, which broken down into exterior surface dimensions is 1.6 meters.

(99) China's Sixth Five-Year Plan stipulates: 17.29 billion yuan for railroad capital construction funds, 2,067 km of newly open railways, 1,689 km of newly-built double track and 2,511 km of newly-built electric railways. The target for the volume of freight transported is 1.2 billion tons and the target for volume of passenger turnover is more than 1.1 billion trips.

(100) Each year railroads consume more than 18 million tons of coal, 700,00 tons of diesel fuel and 380 million kilowatt-hours for hauling power. Therefore, with regards to railroads, it is extremely important to conserve. The energy that the railroads conserved in 1981 was equal to 1 million tons of coal.

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